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XYZ brings 5-axis machining to every workshop

With over 40 years of selling machine tools under its belt, XYZ has continually brought new products to the market that have enabled workshops to become more efficient and increase profitability. This continues to be the case with the new XYZ 400 UMC. It provides the scope for investment that will reduce setup costs when multi-face machining and it offers the opportunity to be upscaled to perform 5-axis simultaneous machining when required.

This latest addition to the company's portfolio is fitted with a 400 mm diameter tilt/rotary table which is driven by a Japanese roller gear cam mechanism. With rotation speeds of 30 rpm of both the B- and C-axis, this no backlash drive system complements the linear roller bearings used on the X-, Y- and Z-axis to ensure high material removal rates but helps to retain the machines inherent rigidity which is provided using Meehanite cast iron as its construction material.

The machines small footprint of 3,030 mm x 2,340 mm, which includes the standard swarf conveyor, hides the fact the machine has a large machining envelope of 800 mm in X, 600mm in Y and 510 mm in Z, which XYZ believe will make it appeal to a broad range of businesses where floor space is limited.



Excellent cutting performance is delivered by employing a built-in spindle which is chilled to reduce machine growth and provides 25.7kW, 35hp, of power. Using a BBT face and taper arrangement on the 40 taper of the spindle increases greater stability when high speed machining or performing heavy cutting, and with the 12,000 rpm available, 15,000 rpm option, reduced cycle times can be achieved.

Fitted with the latest generation Sinumerik One control, the 22" touchscreen gives the operator an enhanced user experience, along with the Shopmill conversational programming adding to the simplicity of the package.

Martin Burton, XYZ's managing director, comments: "This new product has been brought to the market to help manufacturers tackle the issues of reducing setup times, producing more complex parts with less spindles, tackle the skills shortage by producing more with less and allowing for the adoption of automation with the fact it has a front and side door for part loading."

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HELLER becomes part of DN Solutions

Strong partnership for the future of machine tool manufacturing

DN Solutions, one of the world's leading machine tool manufacturers has acquired HELLER. With the agreement signed recently, both companies are laying the foundation for a strong partnership that brings together expertise, markets and visions for the future. HELLER, synonymous with innovation, quality and service in machine tool manufacturing for over 130 years, will continue its long-standing brand. The new partnership opens up additional opportunities, for customers, employees and the entire industry. Together, the two companies will form a strong global player with technological depth and comprehensive process expertise in machine tool manufacturing.



Dynamic from Korea, globally connected

DN Solutions is part of the DN Automotive Group and is one of the fastest-growing companies in the international machine tool industry. With sales of around \$2 billion and more than 2,000 employees, DN Solutions is now one of the top three manufacturers worldwide.

The merger with HELLER strengthens DN Solutions' presence in Europe and expands its portfolio in the field of complex machining centres and 5-axis technologies. "DN Solutions has been competing on the global stage. By combining our strengths with HELLER's over 130 years of expertise in machining centres, this partnership will deliver groundbreaking innovations to the manufacturing industry. Furthermore, the two companies will offer unique value to customers and reinforce their position as a high-end brand in the global machine tool market," explains Wonjong Kim, CEO of DN Solutions.

Engineering expertise with global experience

Since 1894, HELLER has stood for precision,



process expertise and turnkey solutions in machine tool manufacturing. The company employs around 2,100 people worldwide, has production sites on four continents and is recognised as a technology partner in international machine tool manufacturing.

HELLER is particularly valued for its 4-axis and 5-axis machining technologies, its comprehensive service approach and its ability to develop turnkey production solutions for customers worldwide. "HELLER remains HELLER, we are continuing our brand, our DNA and our culture in the new partnership. At the same time, this opens up enormous opportunities for us to leverage our expertise even more effectively within a global network," says Dr. Thorsten Schmidt, CEO of HELLER.

One shared goal: A full-range supplier in machine tool manufacturing

The merger of DN Solutions and HELLER creates one of the world's most comprehensive providers of machine tool solutions. Customers will now have the advantage of being able to meet all their requirements with a single point of contact, from boring mills to 5-axis or turnkey solutions and automation systems.

"By combining our strengths, we will become a true one-stop shop for machine tool manufacturing," says Dr. Schmidt. "In future, customers will no longer have to commission different partners within a network. We offer all solutions from a single source."

Complementary strengths for the future

The combination of DN Solutions and HELLER provides a range of capabilities that complement each other perfectly:

- HELLER stands for engineering expertise, service excellence and the ability to implement complex, customised projects.
- DN Solutions brings momentum, high-volume expertise, the ability to achieve rapid economies of scale and a strong market presence in Asia and North America.

"Each side brings something unique to the table. Together, we will become even stronger and, above all, more relevant to our customers worldwide," says Wonjong Kim.

Added value for customers

For customers, the partnership essentially means one thing: greater choice, faster implementation and access to a unique combination of technologies. Tasks that previously required the collaboration of multiple providers can now be fulfilled entirely by a single partner, efficiently, reliably and future-oriented. The completion of the merger is still subject to the condition precedent of obtaining approvals from the relevant antitrust and other regulatory authorities. DN Solutions and HELLER aim to secure regulatory approvals swiftly.

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New appointment at Erodex

Erodex (UK) Ltd, a leading supplier of EDM graphite, tooling and machining solutions, has announced the appointment of Callum Turley as sales engineer for the South-East region of the United Kingdom.

Bringing with him a diverse and dynamic background in sales and business development, Callum Turley has consistently demonstrated a strong ability to connect companies with the right solutions to drive growth and operational efficiency. His most recent roles include serving as a junior account manager at Terra Computer UK and as a sales development representative at Smart IT, where he specialised in tailoring Odoo ERP solutions to help businesses automate processes and improve decision-making.

Prior to these positions, Callum Turley honed his client engagement skills in technical and consultative sales roles at previous employments, where he was directly involved in supporting businesses through the supply of EDM machinery and consumables. This experience is highly relevant to his new role at Erodex.

Passionate about delivering superior customer service, Callum Turley is known for his driven, target-oriented approach and his ability to foster meaningful conversations that lead to long-term partnerships. His personal philosophy centres around helping companies become more efficient, an alignment that perfectly matches Erodex's commitment to precision, innovation and performance in the EDM industry.

"I'm excited to be joining Erodex UK Ltd and to support manufacturers across the South-East," says Callum Turley. "It's a privilege to work with a company that's known for its quality, expertise and customer-first approach. I look forward to building lasting relationships and helping our clients achieve real success."

Callum Turley's appointment marks a strategic move for Erodex (UK) Ltd as the company continues to strengthen its national sales presence and deliver tailored solutions to the EDM and aerospace sectors.

Erodex (UK) Ltd is a leading supplier of EDM graphite, tooling and machining solutions, trusted by manufacturers in the aerospace



and precision engineering sectors. Alongside its specialist machining services, the company provides a comprehensive range of EDM consumables, from a variety of wires to resin and filters ensuring customers have reliable access to the materials needed for efficient production. With decades of expertise, Erodex is committed to delivering innovation, accuracy and performance, helping businesses achieve the highest standards of efficiency and precision in their operations.

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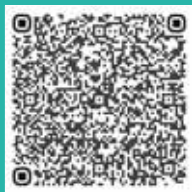
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"I've found it incredibly useful - great for sparking new ideas and making valuable contacts. It's exciting to discover a wide range of technologies and products I hadn't come across before. It's an excellent way to stay up to date with the latest industry trends. The event is massive, with so much to see. I'd definitely recommend attending, and I'm really looking forward to the seminars!"

Peter Bates, Design Engineer, Rolls-Royce

Engineering Subcontractor | November/December 2025 | 5

Business as usual at XYZ Machine Tools Ltd

John Barber meets with Martin Burton, managing director of XYZ to discuss the past, present and future



XYZ Machine Tools celebrated its 40th anniversary in 2024. The company was founded by Nigel Atherton in 1984 and his successor, Martin Burton, took over in June 2024 alongside Chris Hellier. To celebrate this milestone, the company hosted a technology exhibition at its headquarters in Burlescombe, Devon last year, where it took orders worth more than £500,000.

So, how has the past twelve months been for the largest supplier of CNC machine tools in the UK. Martin Burton says: "So far, this financial year, we are doing slightly better than we were last year. As of a couple of weeks ago, we were 8 percent up on 2024. It is fair to say, however, that our overseas market hasn't seen the same growth due to the current economic climate in some European countries. Howard Bamforth our European export sales director has reported that recently things are starting to look up though. There has always been a high level of interest in XYZ products, and although there might be a lack of confidence by some companies others are still investing."

Martin Burton started his career with the company in 1990 and in that time has worked in a variety of roles. Naturally, XYZ Machine Tools has evolved over the years, experiencing growth while moving with the times. He explains: "The company has evolved tremendously and that is

thanks, in large part, to the way the world has changed. It has grown with the modern thought process for businesses and we have continued to stay in front. I remember when I first walked into XYZ, it was clean, it was tidy and even though it was a small company, it felt organised and it made me really want the job. In time, I became the very first applications engineer at XYZ before becoming a salesman and then production manager. With XYZ, it is not just the machine you are buying but it is the whole package. It is this philosophy that has brought us to where we are today. We continue to re-invest back into that quality process even today."

At the present time, XYZ Machine Tools sells between 8-900 machines a year with an impressive range of lathes, milling machines and manual machines that are built to the highest standards. It has long standing relationships with key suppliers as Martin Burton confirms: "The machines that we have are really good, we have a number of suppliers who produce a good quality piece of equipment. We have tasked them to meet the challenges and demands of today's market. The 400 UMC is a prime example of what we wanted moving forward. By our manufacturers working closely with our team of quality experts here, we are able to ensure that this key, hidden part of the business is perfect.

The UK is far behind other countries when it comes to the uptake of 5-axis. We have therefore looked at our previous 5-axis offering which is a big machine and decided to half the footprint. The machine has been thoroughly tested and we firmly believe we have a product that will enable people to move into the area of 5-axis. So, this is a key aspiration for us currently, to get this machine into as many factories that are just doing VMC work."

Artificial Intelligence (AI) is a hot topic right now. So, how is XYZ embracing AI and how will it help to shape the company's future? Martin Burton states: "It's a good question and I cannot comment too much at the moment, other than to say we are fully on board with it and we have projects already in the pipeline for future development. The solutions that are coming in the future look really good and I believe are going to help the industry significantly and will open more doors. AI will suit XYZ quite well as we are renowned for doing low batch numbers, one off design and development work. We can do higher batch numbers, but our specialty is the lower volume. This is where AI can really takeover. So yes, there are things in the pipeline and we are having meetings about it. I am in discussions with the suppliers and there will be some AI technology coming our way.

Many XYZ employees have over 15 years service at XYZ. This level of commitment is testament to how the company values its employees, providing a supportive environment where everyone is treated as equals.

Martin Burton continues: "I believe that a lot of this comes from the way Nigel Atherton ran the company. We are not doing anything differently from how Nigel did it previously, in fact we are simply expanding on it to a certain degree. We value every employee and appreciate the job they do and treating them as an individual ensures they know we care about them as a person as well as an employee. These are people that want to enjoy coming to work, look after your employees and they will look after you is the way we view it. This is what makes the difference, working for XYZ our staff want to go the extra mile. The culture that we want to develop here is of a team that works as one. In fact, for our marketing manager,



Andy McHugh, this is one of the questions he asked when I interviewed him: What is the culture of the company? Here at XYZ, I know that if something happened, whether good or bad and if any extra work was required here, my staff would all be queuing up to help. We currently have around 85 employees, having taken on a few more in our service department and other areas.”

Automation has the power to transform businesses, how they operate and can increase their productivity. So, what solutions can XYZ offer to subcontractors in this area?

Martin Burton observes: “Automation is another area that has had a slow uptake in the UK. I think people are starting to realise that a robot is a solution and not there to take jobs. Our previous experience with a robot taught us a lot and we have now teamed up with Hydafeed and their RoboJob. This is a bolt on solution that we can add as an extra option on our machines. I see automation as a support mechanism for manufacturing businesses. If you are struggling to find skilled staff, and many are, companies need to get the best out of the good people they have already employed. Using automation can create time for these highly skilled people to carry out tasks that get the best out of them and provide job satisfaction. Without a skilled operator, a robot is of no use and so you still require skilled people. The robot is not designed to replace the skilled person but to help them in order to increase their productivity. We like the solution that Hydafeed has as it is quite intuitive and interactive.”

XYZ has the capacity to assemble and deliver over 100 machines per month and parts can be

ordered 24/7 via its Spares and Tooling Web Shop. For anyone still on the fence, why should a subcontractor make its next purchase with XYZ Machine Tools? Martin Burton has the answer: “The reason they should choose XYZ is because we offer the full suite of potential machines that subcontractors would use. Our specialty is low batch design work and we also help customers to get into the area of higher batch production. I think for subcontractors whose businesses need the support from machines and it is the key part of their business, if that machine fails their work stops. This is what XYZ specialises in, our after sales support. This is a major strength of the

company and although it is the hardest part of selling machines, we know it is important. We are able to fix over 50 percent of these problems over the phone and for subcontractors this has to be important for them. Choosing the right partner is very important and that is where we can step in. I do not like using the term ‘One-stop shop’ but this is what it feels like. You can come to us and we can offer the full package. You are not just buying the machine, we are there afterwards as well.”

Almost 18 months after taking the reigns at XYZ Machine Tools, it is clear that the future for the company is bright under Martin Burton’s leadership.

He concludes: “I had a very good boss to look up to with Nigel Atherton and it was always going to be a big challenge, but I was determined to follow in his footsteps. The message has always been clear, it is business as usual and we are not changing anything. It was working before and so why would I want to change it. There are things here that will continue to evolve and that is where I am going to be putting my stamp on things.

“We have the next 3-4 years worth of machines and ideas already planned. I will not give too much away, but we are already working on the next family of machines with a focus on automation, AI and 5-axis.”

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First-ever 30-taper machining centre with 100 tools

At the recent EMO 2025 show held in Hannover from 22nd to 26th September, Japanese machining centre builder Brother introduced a variant of its Speedio U500Xd2-5AX 30-taper, 5-axis machining centre able to deploy 100 different cutting tools, without the need for manual intervention.

It addresses the accelerating industry trend toward high-mix, low-volume production and the need for prolonged periods of lights-out, unattended operation. Sole sales and service agent in Britain and Ireland is Whitehouse Machine Tools.

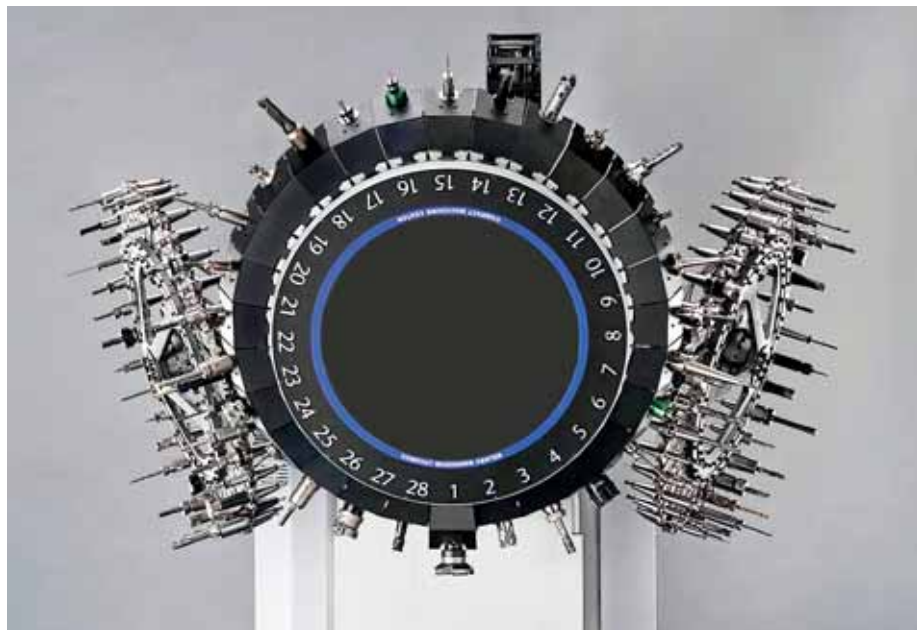
Designed in accordance with Industry 4.0 principles, the U500Xd2-5AX 100T is aimed at subcontractors and OEMs that are already converts to using the efficient face-and-taper BBT30 tool interface, or are receptive to its merits, as opposed to the continued use of more cumbersome 40-taper machines.

Compelling reasons for adopting 30-taper platforms are the very high-speed axis motions, which minimise idle times and raise productivity, the typically 80 percent reduction in electricity and air consumption and the compact footprint. Brother technology also delivers high reliability, maximising consistency of performance.

Previous limitations on tool capacity and process integration within a minimal space on a factory floor have been eliminated and a side shutter for robotic loading and the availability of automated workpiece or pallet storage and handling equipment allows the formation of a



The working area of the Speedio U500Xd2-5AX 100T, which has a footprint of fractionally over 4 m²



Twin 36-tool stockers positioned either side of the 28-tool turret magazine bring the total number of cutters available to 100.

fully automated production cell.

The tool count has been ingeniously boosted by mounting a 36-tool stocker on either side of the 28-tool turret magazine, enabling manufacturers to keep an unprecedented number of different tools, sister tools and special cutters ready for use, without operator involvement.

Despite the large tool storage capacity, the machine maintains its rapid 0.7-second tool-to-tool change time, while other top-end features also remain the same. They include a -30 / +120 degree swivelling trunnion carrying a 75 rpm rotary table and generous axis travels of X:500 mm and Y:450 mm with 50 m/min rapids and 380 mm in Z with 2.2 g acceleration at up to 56 m/min. As on the base machine, spindle speed is 12,000 rpm, or alternatively 16,000 or 20,000 rpm and a further option is 70-bar instead of 20-bar through-spindle coolant.

The combination of an expansive working area, dynamic motion control and high tool capacity allows operators to perform complete multi-face machining in a single clamping, simplifying workflow and reducing cumulative setup errors. Maximum table load is 100 kg, so there is little restriction on the type of workpiece



A side view of the machine, showing the mechanism for cutter exchange from a tool stocker into the turret.

that machinists are likely to want to put on a 30-taper machining centre.

The new model is equipped with Brother's latest CNC-D00 control system with 15-inch LCD touch panel, featuring enhanced functionality for fully interpolative 5-axis machining, tool centre point control and automation interfaces. Support apps provide an overview of production and operational status, load monitoring, power consumption, tool setup and adjustment, recovery support and cycle time optimisation.

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Motorsport inspires subcontractor's investment in Hurco machines

RPH Manufacturing, a tier one supplier based in Wimborne, has consistently prioritised precision, efficiency, cleanliness and innovation throughout its long history. At the helm is owner and managing director Richard Haim, whose passion for engineering, which began 57 years ago, led him to start his own company in 1981.

When asked why he has a preference for Vertical Machining Centres (VMCs) from Hurco, Richard Haim says: "I like the brand because I know a lot of the Formula 1 Teams are customers of theirs. I have been a lifelong motorsport enthusiast and I thought there could be no better endorsement to purchase a Hurco machine tool."

Four Hurco VM-series machines, equipped with Max 5 twin-screen controls running proprietary WinMax conversational programming software, now form the backbone of RPH's workshop. They enable the company to deliver more than 45,000 parts per year to a wide range of industries. Just-in-time and Kanban systems offer customers reliable, often daily supply of parts keep their businesses running and minimise their stockholding.

Richard Haim's relationship with Hurco dates back to 1999 when he ordered his first VMC, followed one year later by a second. Since then, he has added two more to his prismatic machining capacity, drawn by the machines' versatility, user-friendly control system and consistently high-quality output. He now uses a Hurco VM10i, a pair of VM20i models and a VM30i. All have dual-screen controls, allowing program editing on the left-hand side while high-resolution component and toolpath graphics appear on the right.

RPH benefits from Hurco's WinMax conversational programming at the VMC controls, plus an offline seat of the software, which allows data to be prepared remotely and imported directly into the CNC systems on the machines. This seamless workflow does not tie up the machining platforms unnecessarily and shortens order turnaround times. The twin-screen interface, toolpath simulation and dry-run capabilities further support RPH's commitment to right-first-time production.

Richard Haim is always open to innovations and new working methods that can make his business perform more efficiently. A good example is the way in which he has embraced Hurco's Solid Model Import software. Already a user of Hurco DXF software, he was easily able to



realise the additional benefits of applying dimensions directly from a STEP file into a conversational program.

One of the main benefits is that data entry errors are almost eliminated. Imagine a job that involves 100 drilled and tapped holes. A window is drawn around the holes to select them and a tool is chosen for each operation. The rest of the programming is completed automatically. If Tool Optimisation is selected, the number of tool changes is minimised, allowing the machining cycle to be as efficient as possible.

One feature within WinMax that Richard Haim singles out for particular praise due to its utility is 3D Mold/Swept Surface. The functionality in WinMax is used within the conversational programming environment to enable 3D toolpaths to be created by sweeping a 2D profile along a defined path, without the need for G-code or CAM software.

It is intended to assist in programming parts with complex, contoured geometry like pockets whose cycles cannot easily be created using standard 2.5D features, such as compound angles. It can reduce programming time by as

much as 80 percent, depending on the part, and optimises the tool path to achieve exceptional surface finish with user-defined step-overs and direction of cut.

Programming from a WinMax desktop hub, Richard Haim sends programs to the shop floor where he sometimes makes small edits on the left hand screen, confident that the networked machines will perform flawlessly. As the control on each Hurco is identical, according to their availability, parts can be produced on any of them, leading to versatile production planning.

After 44 years in business, Richard Haim is still as committed as ever to running his VM-series machines and has set his sights firmly on reaching RPH's 50-year trading milestone, which will be in 2031. His unwavering commitment to Hurco underscores the value the machines have brought to his business and his confidence in the supplier's ability to support his continued success in the future.

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ASG TGM reinforces aerospace ambitions with sixth Mazak machine



(L-R) Sarah Stephens, managing director and Dan Hall, director of ASG TGM (2)

ASG TGM has acquired a sixth Mazak VTC-800 vertical machining centre as part of a £1.75 million investment in its new 11,000 sq ft facility in Preston.

The machine has been installed in a newly established machine shop, adjacent to the existing machining facility. This expansion enhances the Group's capability to deliver complex aerospace orders, particularly the machining of large structural components to exceptionally high tolerances.

The VTC-800 is one of Mazak's flagship, UK-built machines, offering full 5-axis capability for machining a wide variety of large and complex components. It features a vertical travelling column design and is equipped with an exceptionally large working envelope, along with a high-performance 18,000 rpm spindle as standard.

Sarah Stephens, managing director at ASG TGM, says the machine is part of a deliberate strategy to support OEM and Tier 1 aerospace suppliers: "The new facility and machines effectively create a mirrored production cell that complements our existing machine shop, which is already equipped with three Mazak machines. The new cell will increase capacity, flexibility and improve workflow, which is vital to ensuring we continue to provide a fast and efficient service to our OEM and Tier 1 aerospace customers."

"The working envelope of the VTC-800 is ideal for the type of aerospace work we are now undertaking, such as butt straps, spreader plates and intercostals, through to structural aircraft parts like large ribs for wing assemblies. The SDR variant has a compact footprint and we can achieve 360° rotation with milled parts, which gives us much better access to the component."

TGM was established in 1998 and is now part of the ASG Group, which specialises in supplying detail parts and tooling to some of the world's leading OEMs and Tier 1 suppliers in the aerospace, medical, scientific and nuclear sectors. The company offers 3-, 4- and 5-axis machining of hard and soft metals up to 4.8 metres in length, with a total of 18 machines at its Preston site.

Alan Mucklow, managing director for UK, Ireland and national distributors at Mazak, says the VTC-800 is an ideal machine for aerospace applications: "The VTC-800, designed and built in the UK, is one of our most popular machines, with more than 1,000 now in operation across Europe."

"The machining envelope of the VTC-800 is one of the largest in its class, making it ideal for large engine components, while maintaining the flexibility to meet different application needs. Mazak has a long history of

supplying machines to the aerospace sector in the UK and globally and we are delighted to support ASG TGM in the next stage of its growth."

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GET IN TOUCH







LVD wins contract to build heavy-duty custom press brake for commercial aerospace application

Ultra-modern Synchro-Form will fabricate structural components for the Ariane 6 rocket program set to advance Europe's competitiveness in the commercial space market

LVD Company nv, one of the world's leading suppliers of heavy-duty press brakes, has won a major contract to manufacture a custom Synchro-Form press brake for MT Aerospace AG, based in Augsburg, Germany, a subsidiary of the space and technology group OHB SE. A state-of-the-art heavy bending machine, the Synchro-Form 800-ton, 7-metre press brake will produce critical structural components for the European Space Agency (ESA) Ariane 6 space rocket program, an initiative aimed to enhance Europe's position in the global space market. The order reinforces LVD's reputation as a trusted supplier of advanced, high-performance bending equipment and heavy-duty press brakes tailored to meet demanding operational requirements.

"This contract represents a strong endorsement of LVD's bending expertise," says Carl Dewulf, CEO of LVD Group. "It reflects the confidence placed in our engineering expertise and proven history in meeting challenging forming applications."

Synchro-Form: Precision for large parts

Synchro-Form is next-generation adaptive bending technology engineered to accurately bend workpieces of four metres or more and in specialised materials. It automatically maintains angular consistency and the required geometric profile when handling, positioning, and bending

large parts. LVD developed the first Synchro-Form for Kawasaki Heavy Industries (KHI), a significant partner with Boeing in the development and production of the 777X aircraft. This successful installation involved precise bending of large fuselage segments.

Evolving commercial space market

Advanced manufacturing technology is helping evolve the commercial space market to a more diverse and private sector-led industry, fuelled by private entrepreneurship and innovation.

MT Aerospace develops, designs and manufactures the metallic aerostructures for the Ariane 6 heavy-lift rocket, which was first launched in 2024. MT Aerospace has been significantly involved in the Ariane 6 program and has introduced several innovations to increase the performance and reduce the cost of the European launcher. The Synchro-Form press brake, planned for installation in spring 2026, will reduce component manufacturing time and allow forming of complex, high-tolerance parts.

MT Aerospace

MT Aerospace is a leading international aerospace company. More than 500 employees develop, manufacture and test components for institutional and commercial launch vehicle programs, for aircraft, satellites and for applications in the automotive and defense



Two components of the Ariane 6 rocket whose panels serve as the basis for developing the Synchro-Form press brake:

1. ESR Forward Skirt, part of the Ariane 6 booster.
2. LLPM ITS: Lower Liquid Propulsion Module Inter Tank Structure, part of the Ariane 6 main stage.

industries. Thanks to manufacturing technologies that are unique worldwide, MT Aerospace creates high-performance products that combine maximum performance and minimum weight.

About LVD

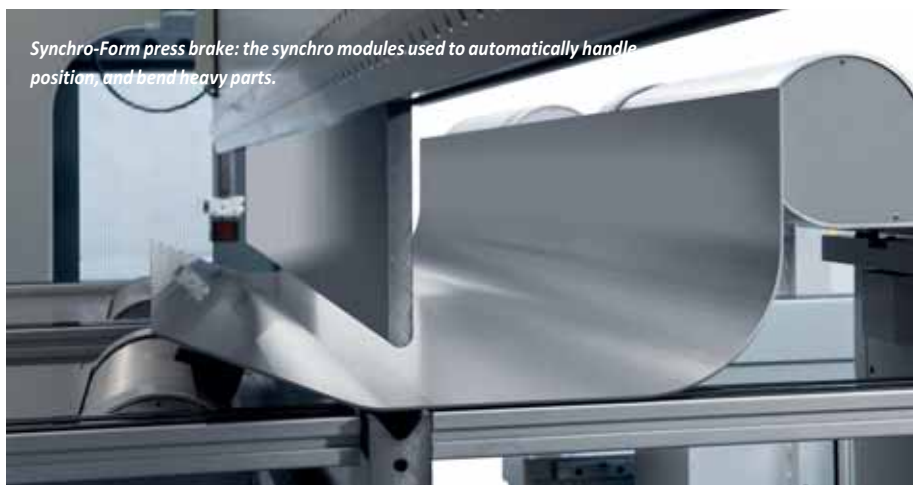
LVD is a leading manufacturer of sheet metalworking equipment, including laser cutting systems, punch presses, press brakes, robotic bending systems, automatic and semi-automatic panel benders, guillotine shears and automation systems, integrated to and supported by its CADMAN® software suite. LVD Industry 4.0-ready products and technology make smart manufacturing possible.

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Synchro-Form press brake: the synchro modules used to automatically handle, position, and bend heavy parts.

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Precision engineering firm invests £250,000 to enhance quality control

Basildon-based Rodwell Powell, a leading specialist in precision machining for the aerospace, defence, marine, construction and other industries, has invested £250,000 in a comprehensive renovation of its inspection department. The centrepiece of the upgrade was the acquisition of two Coordinate Measuring Machines (CMMs) manufactured by LK Metrology at its Castle Donington, Derbyshire factory. They are delivering high levels of accuracy and efficiency to support increasingly complex quality control requirements for Rodwell Powell's prestigious clients, which include Rolls-Royce Aerospace and Caterpillar.

Founded in 1951 by John Rodwell, the eponymous company has a legacy of precision engineering dating back to World War II, when his exceptional engineering talent was recognised after he was conscripted into the British Army. He was recalled to lead a team of hundreds of skilled workers who were contributing to the war effort, an endeavour that included the manufacture of critical tooling and components for the Spitfire combat aircraft. His leadership and expertise during this crucial period laid the foundation for the future company's enduring focus on precision and quality.

Now, more than 80 years after the Second World War, Rodwell Powell has come full-circle by once again manufacturing Spitfire axles, but this time for specialist restoration projects to ensure the legendary aircraft continues to fly. Requiring a blend of traditional craftsmanship and modern techniques, such projects combine the company's rich heritage with cutting-edge manufacturing, which has led to it also supplying high-precision components for Rolls-Royce jet engines, Caterpillar heavy machinery and other prestigious OEM equipment.

It was the growing complexity and size of components that prompted Rodwell Powell to review its inspection department's facilities. The ensuing transformation saw the installation of two next-generation LK Metrology Altera C CMMs, enabling the subcontractor to handle larger, more intricate parts with greater accuracy and efficiency. The scope of the investment in QC encompassed the creation of an ultra-modern environment featuring a newly designed, naturally lit inspection room to enhance inspector focus and comfort. Improved LED lighting and ceiling enhancements ensure optimal visibility for precise measurements.



Four images of the LK Altera C 10.7.5 CMM inspecting a Spitfire axle at Rodwell Powell's Basildon facility.

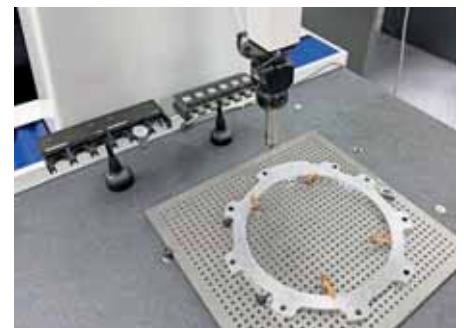
Ergonomic workstations and inspection desks further optimise efficiency.

By providing inspectors with the best possible tools and working conditions, Rodwell Powell is ensuring the highest QC standards. This has been reinforced by the recruitment of an experienced senior quality inspector, who was immediately enrolled onto LK Metrology's advanced CMM training programme. To maximise the potential of the new technology, the rest of the inspection team has also undergone comprehensive training, having completed an intensive, week-long course in Castle Donington.

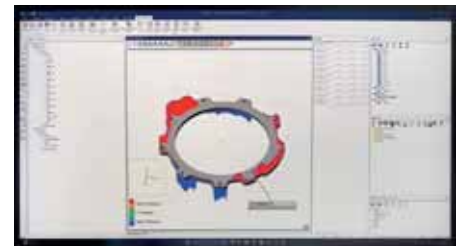
One of the new CMMs is an LK Altera C 10.7.5 equipped with a Renishaw PH10M Plus motorised indexing head deploying an SP25M probe with an SH25-2 stylus holder, which can perform scanning for form measurement and reverse engineering as well as touch-trigger probing for accurate geometrical measurements. Featured also is a 6-port stylus change rack to enable unattended completion of complex inspection routines. The second CMM is a smaller LK Altera C 7.7.5 with PH10M Plus and SH25-2 and additionally equipped with a Renishaw TM25-20 touch-trigger probe module, allowing the continued use of legacy CMM Manager software alongside LK's latest CAMIO 2024 R2. The latter is CAD-based metrology



software underpinning the use of multiple sensors, intuitive programming, simulation and execution, results analysis, advanced GD&T, powerful reporting and automation. Both CMMs are driven by LK's NMC300 controller, which



Two further images showing inspection of a clutch backing plate.



supports an array of probing systems and sensors and is automation-ready for integration into modern manufacturing environments.

Andrew Rodwell, managing director of Rodwell Powell comments: "Our investment in LK Metrology's cutting-edge CMM technology is a game-changer for us. Not only does it reinforce our capabilities in aerospace and defence engineering, but it also ensures that we continue to meet and exceed the highest industry standards. The CMMs allow for increased accuracy, greater throughput and reduced lead times, reinforcing our reputation for uncompromising quality in these highly demanding industries."

Brandon Sanders, CMM quality inspector at Rodwell Powell adds: "With larger and more complex components being manufactured these days, our enhanced inspection capabilities will be critical in maintaining absolute precision for Rolls-Royce, Caterpillar and our Spitfire restoration partners."

LK was selected to provide the new CMMs after careful assessment by the quality team at Rodwell Powell, which cited several key factors in the decision. They include the supplier's UK-based manufacturing and technical support, advanced scanning technology and seamless software integration, plus the ability to provide

bespoke operator training to ensure maximum efficiency. The close collaboration between the two companies will ensure smooth implementation of the new technology and ongoing support.

As part of the collaboration, LK is providing not only operator training, but also a trial license for CAMIO OFFLINE, a virtual CMM environment allowing users to create, simulate and optimise inspection programs on a computer, without needing to tie up the physical CMM, thus maximising machine uptime and streamlining the programming process.

Committed to developing the skills of future generations of engineers, Rodwell Powell has donated its previous LK Integra 6.5.4 CMM to a local training facility in order to provide aspiring engineers with hands-on experience using world-class metrology equipment. This initiative reflects a dedication to supporting education and ensuring that future engineers have access to modern measurement and inspection technology.

About LK Metrology

LK Metrology is renowned for innovative metrology solutions and services. The company's products, including Coordinate Measuring Machine (CMMs), portable

measuring arms and metrology software, are used worldwide to control and improve the quality of manufactured components. Its precision technology underpins the process chain from design, development, production and assembly through to quality assurance in global industries such as automotive, aerospace, defence, motorsport, energy, medical and contract inspection.

Established in England in 1963, LK Metrology has an impressive heritage in metrology dating back to the birth of CMM technology. Founded by CMM pioneer Norman Key and his father-in-law Jim Lowther, LK Metrology is credited with many of the CMM industry's firsts including: The first bridge-type design, first OEM to integrate computers, first to use a touch trigger probe, first to develop inspection software, first to use all air bearings and granite guideways, first to use carbon fibre composite spindles, first to use microprocessor-controlled drive systems, first to produce a truly thermally stable CMM and first to produce a high-accuracy horizontal-spindle CMM.

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Moyola Precision Engineering powers aerospace growth with the UK's first HBZ AeroCell 160 | 400



With demand in the aerospace sector continuing to rise, Moyola Precision Engineering has taken a bold step forward in its production capabilities, investing in the UK's first HBZ AeroCell 160 | 400 5-axis horizontal machining centres from bavius. The machines mark a major milestone in Moyola's ongoing commitment to performance, innovation and global competitiveness.

Engineering a new era of productivity

In response to continued growth and increasing demand across the aerospace sector, Moyola launched a strategic R&D initiative to expand capacity and revolutionised its manufacturing approach for a major international aerospace program. The project focused on developing a new method of manufacturing, incorporating innovative tooling strategies and a reimagined, highly-efficient production workflow. Central to this initiative was the installation of two HBZ AeroCell 160 | 400 machines, one installed in December 2023, the second in February 2025, configured as a fully integrated twin-pallet manufacturing cell and tailored for high-speed machining of large aluminium aerospace parts.

Lee Averill CAD/CAM engineering manager at Moyola remarks: "The HBZ AeroCell setup has

played a pivotal role in redefining our approach to large workpiece machining, consistently exceeding expectations in both speed and precision."

High-Speed, high-precision machining at scale

Built by bavius, a German machine manufacturer with over four decades of experience in 5-axis machining, the HBZ AeroCell 160 combines speed, precision and reliability. Headquartered in southern Germany, bavius has become a global technology partner for high-performance aluminium machining particularly in the aerospace sector.

With horizontal machining, unique dual pallet changer and a powerful, high-performance spindle, the machine delivers:

- Realistic, in-action material removal rates in excess of 12 litres per minute, not compromising on process reliability even in large-volume parts.
- Precision machining across large, complex geometries, maintaining tight tolerances even at high speeds.
- Seamless transitions between roughing and finishing operations.
- Significantly reduced cycle times with rapid tool changes, synchronised twin-pallet

operation and intelligent process control combined with high machine dynamics.

Lee Averill states: "The installation of the HBZ AeroCell was smooth and efficient, with minimal disruption. Since commissioning, machine uptime has been good and operational performance has exceeded expectations."

From installation to impact

Now the installed AeroCell machines are operating at full production capacity. Thanks to optimised engineering, intelligent pallet handling and a well-balanced takt time, Moyola benefits from a highly stable and continuous machining process with minimal downtime an ideal setup for scaling production while maintaining precision and consistency.

This new capability has allowed Moyola to deliver on critical production commitments with greater flexibility and efficiency. The combination of high-speed machining and ultra-precise output means Moyola can continue to meet the demanding requirements of the aerospace sector with confidence.

A long-term technology partnership

The successful deployment of the UK's first HBZ AeroCell 160 | 400 machines underscores a deepening partnership between Moyola and bavius. Both companies share a commitment to quality, technical excellence and driving innovation in aerospace manufacturing.

Lee Averill explains: "Deploying the UK's first HBZ AeroCell machines marks a major step forward in our partnership with bavius. Embracing this cutting-edge technology has been both exciting and challenging, driving innovation while reinforcing our shared commitment to excellence."

About Moyola Precision Engineering

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solutions through the precision manufacture of complex 5- and 6-axis components. With advanced capabilities in machining, assembly, kitting direct to line and in-house treatments and chemical processing, it supports OEMs and Tier 1 and 2 suppliers with end-to-end manufacturing excellence. Specialising in aluminum, titanium, steel and plastic components, Moyola combines cutting-edge technology with deep industry expertise to meet the most demanding specifications in civil and defense aerospace programs.

Founded in 1976, Moyola Precision Engineering began as a small manufacturing business in Castledawson, Northern Ireland. Over the decades, it has grown into a world-class provider of integrated machining and assembly solutions, serving the global aerospace, defense, space, and industrial sectors. The company has built a strong reputation for precision manufacturing, particularly in complex 5- and 6-axis components, and has continually expanded its capabilities through significant investment in technology, facilities and workforce development.

Moyola has achieved international success by exporting to customers across Western Europe,

North America, Asia, and South Africa. Its commitment to innovation is reflected in its consistent reinvestment in research and development, up to 30 percent of turnover in some years and its collaboration with universities and government agencies. In recent years, Moyola has doubled its floor space and added a NADCAP-certified treatments facility, reinforcing its position as a key supplier to major aerospace programs.

About bavium technologie gmbh

For over 40 years, bavium technologie gmbh has been a leading manufacturer of 5-axis high-performance machining centres for high-speed milling of large structural parts. Based in Baienfurt, Germany, the owner-managed company offers modular machine concepts from stand-alone systems to automated manufacturing cells with spindle speeds up to 30,000 rpm. Ideal for aerospace, extrusion and façade applications, their



solutions combine speed, accuracy and flexibility. bavium supports customers from concept to commissioning with expert knowledge, digitalised processes and certified quality management. A global service network and dedicated employees ensure efficient implementation, reliability and continuous innovation in aluminium high-performance machining.

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New machine tool investments give leading precision subcontractor the best of both worlds

An investment in two, new DN Solutions' multi-tasking lathes from Mills CNC helps leading precision subcontract specialist, Nortim Precision Engineering, consolidate and strengthen its supply chain position with existing customers and secure new machining contracts with new customers.

Mills CNC, the exclusive distributor of DN Solutions' and Zayer machine tools in the UK and Ireland, has recently supplied leading precision subcontract specialist, Nortim Precision Engineering Ltd., with two new FANUC-controlled DN Solutions' multi-tasking turning centres.

The machines, a 12" chuck Puma 3100LSY and an 8" chuck Lynx 2100LSYB, both equipped with sub-spindle, Y-axis and driven tooling capabilities, were installed at the company's 7,000sq. ft. machine shop facility in Stonehouse, Gloucestershire, in April and July 2025 respectively.

The two recent acquisitions have increased and strengthened Nortim Precision Engineering's in-house machining capacity and capabilities, helping the company consolidate its supply chain position with existing customers and secure new machining contracts with new customers.

The two machine tool investment provides evidence of Nortim Precision Engineering's continuous improvement programme in action and underscores the company's commitment to reduce lead times and deliver 'right first time, every time', high-quality machined components to its customers.

Since being installed, the two new multi-tasking lathes have been put through their paces machining a range of high-precision, complex components for a growing number of domestic and international customers in the oil and gas, medical, pharmaceutical, food and drink processing, automotive, materials handling and electronics sectors.

Parts processed by Nortim Precision Engineering, which can also include prototypes, are characterised by their tight tolerances and super-fine surface finishes and are typically machined in small-to-medium batch sizes from stainless steels, Duplex, carbon steel, aluminium alloys, Inconels and engineering plastics.

Part cycle times vary. For complex components with intricate features and made from difficult-to-machine materials, it is not uncommon for part cycle times to exceed three to four hours.

As well as machining and supplying batched components, Nortim Precision Engineering can, and does, provide customers with full and/or sub-assemblies too.

Established in 1971 and currently employing 15 members of staff, Nortim Precision Engineering is a small, progressive family-owned business that regularly invests in new, advanced

machine tools and ancillary technologies to increase its productivity, improve its process efficiencies and maintain its competitive edge.

The company's ethos and a shared, company-wide business approach based on integrity, trust and transparency, separates Nortim Precision Engineering from many of its competitors and has helped the company build a positive reputation with its customers and across the markets and industries it serves.

Tony Powell, Nortim Precision Engineering's managing director, says: "Our word is our bond. We do what we say, deliver on our promises and go the extra mile for our customers."

Relationship with Mills CNC

Nortim Precision Engineering is no stranger to Mills CNC and, since 2004, has invested in a number of Daewoo, Doosan and, most recently, DN Solutions' CNC lathes and machining centres from the Leamington-based supplier.

Jon Kemper, Nortim Precision Engineering's manufacturing director explains: "We have built strong relationships with Mills CNC over the



years and, in addition to liking the high-performance machine tools the company sells and supports, also value the range of after-sales services that Mills provides. Mills always seem to have the right specification machines we're looking for and can often deliver and install them, from stock, in double-quick time."

New machine tool investment

At the start of the year, Nortim Precision Engineering was facing a dilemma and it concerned the company's machining capacity and capabilities. An existing specialist bathing and care equipment customer approached Nortim Precision Engineering to ask if it could take on extra and regular work machining highly-accurate tubular/cylindrical component parts for its range of height adjustable baths.

As the length of tube required to be machined was beyond the capacity of the company's existing CNC lathe, Nortim Precision Engineering approached a number of machine tool suppliers to discuss its processing requirements in more detail. One of the companies approached was Mills CNC.

Lee Marner, Nortim Precision Engineering's director explains: "Coincidentally, we had recently visited Mills' facility to check out the

capacity and capabilities of a new DN Solutions' Puma 3100LSY multi-tasking lathe and investigate its suitability to machine a range of parts for a completely different customer.

"We liked what we saw and could see that the 12" chuck/102 mm bar capacity Puma 3100LSY with its 1,285 mm maximum turning length and 420 mm maximum turning diameter would be the ideal machine to handle both projects."

Rather than opt for a 2-axis version of the Puma 3100L series, the company, importantly, decided on the sub-spindle, Y-axis and driven tooling variant.

Jon Kemper states: "The multi-tasking, mill-turn capabilities of the Puma 3100LSY were a key selling point."

Having access to a long-bed, high-precision lathe with a 10" chuck sub-spindle, 4,000 rpm and full mill/drill capabilities, 5,000 rpm, would enable Nortim Precision Engineering to machine large and smaller complex parts in one setup rather than having to stop the machine and re-orient the part to complete back-end turning operations, transferring parts over to the company's machining centres for milling operations.

"The productivity gains we could achieve from embracing 'one-hit' machining, eliminating stop-start production and taking pressure off

our existing milling resource, were also vitally important in our decision making process," says Lee Marner.

Once the price was agreed, Nortim Precision Engineering ordered the new Puma 3100LSY from Mills CNC and eagerly awaited its delivery. They didn't have long to wait. With the Puma 3100LSY being installed a month after placing the order, it didn't take that long for the machine's capacity to be effectively 'tied-up.'

With new machining contracts coming in 'thick and fast' and with Nortim Precision Engineering reaping the productivity benefits from investing in its first multi-tasking lathe, the company decided to invest in a compact multi-axis lathe to handle a majority of its smaller part processing requirements.

Tony Powell concludes: "Again we went with Mills CNC and invested in a DN Solutions' Lynx 2100LSY lathe, an 8" chuck/65mm bar capacity compact lathe with a sub-spindle, 6,000 rpm, a Y-axis and driven tools, 6,000 rpm. The machine was installed in July 2025 and is already having an impact."

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Gewefa toolholder supply to Hurco surpasses two decades



An alliance of more than 20 years has existed between machine tool provider Hurco Europe and toolholding equipment supplier Gewefa UK. The company has been a perennial participant at the annual Hurco Open Houses held in its High Wycombe showroom and technical centre, along with about a dozen other supplier firms promoting everything from cutting tools to metrology, workholding to fire suppression, finance to CAD/CAM.

David Waghorn, managing director of Hurco Europe comments: "I regard our association with Gewefa UK over the years as a partnership rather than a supplier arrangement. About 20 percent of the machining centres we supply to customers include back-end tooling packages and three-quarters of those are sourced from Gewefa UK."

He went on to explain that the remainder of the back-ends are mainly Hurco's own toolholders, which are ideal for entry-level, lower-spindle-speed applications. For Hurco machines that offer higher spindle speeds, generally from 12,000 to 18,000 rpm, especially the Hurco 5-axis models in the SRT, SW, VC and U series, Gewefa UK is the preferred toolholder supplier and a majority of machines are shipped with its products.

One Hurco machining centre, the 3-axis VM10HSi, which is now fitted with an HSK-40 interface rather than the previous BT30, is offered with a 30,000 rpm spindle and it is difficult to imagine it being delivered with anything other than holders from Gewefa UK.

The reasons for adhering to this supplier are many, according to David Waghorn. He asserts that the quality/price ratio of the toolholders is equivalent to that of the machines Hurco supplies and that the holders are positioned

towards the upper end of the market in terms of their functionality. Gewefa UK has in its portfolio a vast range of BT and CAT 30, 40 and 50 holder options and their HSK and DIN equivalents to suit any requirement and is very willing to tailor its standard tooling packages to suit an end user's needs.

For example, collet holders will frequently be swapped out for other varieties, such as a side lock (Weldon) type, or a shrink-fit or hydraulic holder with through-coolant or air delivery, both of which are designed for high tool grip, vibration damping and consistent, repeatable accuracy. Likewise, special extended holders are often supplied. All toolholders are dynamically balanced as standard, with those destined for high-speed machining receiving an additional, higher-grade precision balance.

Once the content of a typically 14- to 24-piece Gewefa tooling package for prismatic machining has been established, consistent with the type of work generally carried out by the OEM or subcontractor, from fairly open tolerance up to extremely tight tolerance, delivery is described by David Waghorn as prompt. Perhaps more importantly, the after-sales service provided by Gewefa UK to Hurco customers to provide any additional tooling is also timely, as well as comprehensive.

In the case of the fixed-head turn-milling machines that Hurco supplies, the relationship with Gewefa UK is somewhat different. More

than 90 percent of driven-tool Hurco lathes, whether they have a VDI or BMT turret, are delivered with a tooling package from EWS Weigle, Germany, one of six European tooling product manufacturers represented in the UK exclusively by Gewefa UK under sole agency agreements.

The Gewefa Varia.VX range of toolholders with dual face and taper fit was introduced a few years ago for the rapid exchange of driven tools in lathes. It has proved popular with users of Hurco turning machines due to its rigidity, reliability and accuracy and the good surface finish achievable on the components being machined. Recently, for exchanging static turning tools quickly and easily, the compatible Varia.VXT quick-change system was launched and these toolholders are also offered by Hurco.

Another new introduction, this time by Gewefa UK itself, is the M96 and M96+ hydraulic adapter range for live tooling, which converts ER-driven toolholders into inexpensive hydraulic chucks. The innovation avoids the limited clamping force, runout issues and lengthy tool



change times associated with mechanical ER holders, while also damping vibration and extending tool life, so are likely to prove popular with precision turned parts specialists.

The cooperation between Hurco and Gewefa UK goes even deeper. Another of Gewefa UK's sole agency sales agreements is with German firm OTT-Jakob Spanntechnik, which manufactures drawbars used in the construction of Hurco machining centres.

An additional German company that has appointed Gewefa UK to sell its products in the UK exclusively is Rineck Werkzeugtechnik, whose toolholder shrink-fit machines are sold by Hurco, as are the angle heads and speeders produced by Swiss firm Pibomulti, which has a similar exclusive agreement with Gewefa UK.

The firm's managing director Nicole Lloyd-Foxe comments: "The longstanding partnership we have had with Hurco Europe is based on mutual support. We have developed tooling packages over the years that not only meet their customers' requirements, but are also flexible enough to be tailored to suit the end user's needs.

"It is a perfect example of our ability to deliver comprehensive, bespoke equipment packages from a single source and provide support to machine sellers in Britain and Ireland. We offer



not just back-ends and other toolholding products, but also ancillary equipment such as tooling trolleys, all at a competitive price.

"Additional offerings include OTT-Jakob Power-Check milling spindle pull-in force monitoring devices for predicting when preventive maintenance will be needed and EWS Varia Clean for maintaining tool concentricity and optimising the lifetime and performance of the lathe toolholders.



David Waghorn concludes: "Our continued use of products from Gewefa UK is not just down to the flexibility provided by their ability to deliver a huge breadth of toolholding products.

"It is also due to the knowledge that the supplier brings to bear to address customers' toolholding requirements, even those that many potential suppliers would find intractable and to keep them running reliably for the duration of their service lives."

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Sixth Dugard Installation supports growth

Nestled in the South Downs of East Sussex, Dicker Precision Components Ltd has been quietly building a reputation for excellence in precision machining since its founding in 1973. What began as a small CNC workshop in Hailsham has evolved into a thriving machine shop with the support of machine tools from Dugard.

The company's location near Eastbourne proves advantageous for its core market focus. As director Mark Love explains: "90 percent of our business is related to the pump industry and 90 percent of this involves machining stainless steel. The Eastbourne area is renowned for pump manufacture in the UK." This geographical advantage has helped Dicker Precision carve out a specialised niche serving everything from the aerospace and automotive sectors to the defence, medical and offshore sectors. To continually machine stainless, the company has invested in Dugard machines for their rigidity, stability, power and of course, the impeccable levels of service.

The ISO: 9001 certified company has built its reputation on delivering 'phenomenal quality components' in both small and large batches to

companies worldwide. As the company is enjoying what Mark Love describes as its 'best year yet,' Dicker Precision has invested in its sixth machine from Brighton-based Dugard. As Mark says: "It's been a very challenging year, but we've invested and the orders keep coming in thick and fast, which is great."

The latest acquisition, a Dugard 760XP VMC, represents both a strategic capacity increase and a technological upgrade designed to meet growing demand whilst improving productivity. The decision to purchase another Dugard machine was influenced by several practical considerations, with proximity being key. As Mark Love explains: "Dugard is located in Brighton, just 25 miles away. We've got the support and service. If we ever have a breakdown, they're in quick, or we can go and pick parts up within the hour. We've always had the support from Dugard."

The Dugard 760XP was selected for a number of reasons. Importantly, its compact footprint with a large work envelope was a crucial consideration given space constraints that are a challenge for any subcontract business.

The 760XP represents the latest chapter in



Dicker Precision's ongoing relationship with Dugard. Its existing fleet includes a Dugard Eagle 1000 VMC with 4th axis capability, a Dugard 1000Y+ VMC, a Dugard HD1886B BT50 VMC and a Dugard 1100 VMC.

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Autonomous 5-axis machining around the clock

Since 1983, Peter Josef Klein Feinmechanik GmbH (PJK), a 50-employee subcontractor based in Sankt Augustin, near Bonn in western Germany, has been producing precision components and assemblies from aluminium, titanium, stainless steel and high-performance plastics for customers principally in the medical, food and aerospace industries.

For metal cutting, the company mainly uses machine tools from DMG MORI, including seven DMU 60 eVo machining centres, all of which are automated. Two of them are connected via a pallet handling system, which has 40 locations and can accommodate 300 fixtures that can be swapped between the pallets. An Erowa MTS zero-point clamping system is used as the basis for the flexible, automated cell.

Second-generation Peter Klein, who runs the company with his brother Julian, says: "We accompany our clients from initial consultation through prototyping and series production to finished product delivery.

"Our main challenges are the extreme quality customers require and the high degree of competitive pressure. Our components are accurate to within microns, while at the same time we also have to continuously check and optimise our processes."

One way of meeting these challenges is autonomous manufacturing. PJK has been using automated manufacturing cells to maximise machine utilisation since 2011. It means an employee can operate several machines during day shifts and the company gains extra production output during unmanned running overnight and at the weekend.

PJK has been using DMG MORI machining centres for many years. To ensure precise and dynamic machining, the majority of them are fitted with linear drives.

Julian Klein comments: "The machines produce our range of components efficiently by 5-axis machining and also meet our tight tolerance requirements.

"Customers stipulate accuracies down to single-figure microns and we have to hold them consistently. 5-axis machining contributes to our ability to control this level of quality, as the number of manual reclampings is reduced or even eliminated."

On the two DMU 60 eVo machines integrated into the large pallet handling system, DMG MORI developed and fitted a table with an embedded MTS zero-point clamping system. The original table with a mounted fixture took up a lot of space, whereas the current solution is lower profile and of smaller circumference, maximising the working volume and reducing the risk of interference between component and cutters. Additionally, machining is more stable, leading to better accuracy and surface finish.

Peter Klein sees a major advantage in the flexibility of the pallet handling system. He adds: "The MTS clamping system makes it possible to use traditional machine pallets, including with towers for series production. It leads to a very wide range of components that the two DMU 60 eVos can machine completely autonomously.

"It means, however, that the manufacturing cells need to be very reliable to avoid interrupting production. The seven machining centres are in continuous use for up to 22 hours



per day and any downtime would have a detrimental impact on productivity, which is why DMG MORI's all-encompassing service provision is very important."

Extensive use is made of digital technology at the Sankt Augustin factory. It starts with flexible order planning in a CRM system, extends through CAD/CAM, programming and manufacturing and on to computer-aided quality control. If a tool breaks during a cycle, the machine stops automatically and the cutter is exchanged for a sister tool to allow production to continue almost seamlessly.

The Klein brothers are committed to digitalisation, regarding it as a decisive competitive advantage. Consequently, all future investments will be influenced by their ability to be incorporated into an end-to-end digital workflow.



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ABB and LandingAI unleash the power of generative AI for robotic vision

ABB Robotics has invested in California-based LandingAI to accelerate the transformation of vision AI, making it faster, more intuitive and accessible to a broader range of users. This first of its kind collaboration will integrate LandingAI's vision AI capabilities, like LandingLens™, into ABB Robotics' own software suite, marking another milestone in ABB's journey towards truly autonomous and versatile robots.

"This announcement is the latest in our decade-long journey to innovate and commercialise AI, benefitting our customers by enhancing robot versatility and autonomy to expand the use of robots beyond traditional manufacturing," says Sami Atiya, president of ABB Robotics & discrete automation. "The demand for AI in robotics is driven by the need for greater flexibility, faster commissioning cycles and a shortage of the specialist skills needed to program and operate robots. Our collaboration with LandingAI will mean installation and deployment time is done in hours instead of weeks, allowing more businesses to automate smarter, faster and more efficiently."

As part of the collaboration ABB has made a venture capital investment through ABB Robotics Ventures, the strategic venture capital unit of ABB Robotics, driving collaboration and investment in innovative early-stage companies that are shaping the future of robotics and automation.

LandingAI's LandingLens is a vision AI platform that enables the rapid training of vision AI systems to recognise and respond to objects, patterns or defects with no complex programming or AI expertise required.

Through this collaboration, ABB Robotics will reduce robot vision AI training and deployment time by up to 80 percent. Once deployed,

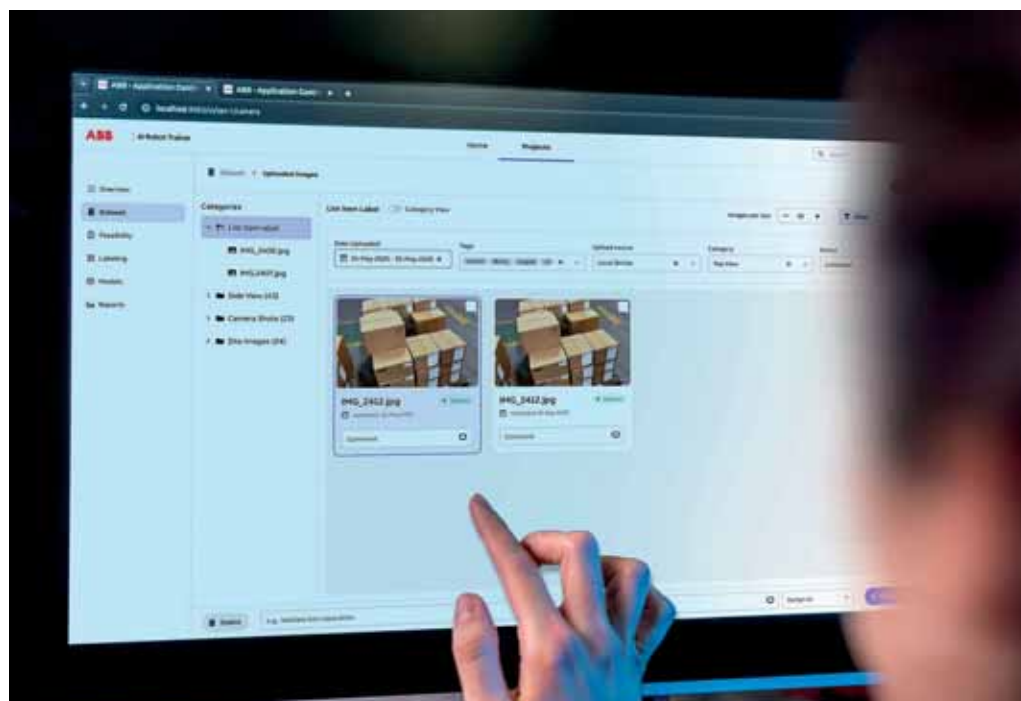
system integrators and end users can retrain the AI for new scenarios on their own, unlocking a new level of versatility. This is a critical step in scaling robot adoption in dynamic environments, beyond traditional manufacturing, especially in fast-moving sectors such as logistics, healthcare and food and beverage. ABB is already piloting LandingAI's technology and actively working to integrate it into existing vision AI applications, including item-picking, sorting, depalletising and quality inspection.

"AI is advancing quickly, creating many opportunities, but also requiring us to keep learning and adapting new skills," says Dan Maloney, chief executive officer of LandingAI. "By combining LandingAI's vision AI capabilities with ABB's robots and software, we can make

automation more accessible. This makes it easier for businesses to deploy and scale intelligent robotic systems that are practical and useful.

ABB Robotics is the only robotics company offering a fully integrated AI training tool within its software suite. It will be available alongside ABB's powerful simulation and programming tool RobotStudio®, which features digital twin capabilities to further simplify commissioning.

ABB Robotics & Discrete Automation, as one of the world's leading robotics and machine automation suppliers, is the only company with a comprehensive and integrated portfolio covering robots, Autonomous Mobile Robots and machine automation solutions, designed and orchestrated by our value-creating software. We help companies of all sizes and



sectors, from automotive to electronics and logistics, to outperform by becoming more resilient, flexible and efficient. ABB Robotics & Discrete Automation supports customers in the transition towards the connected and collaborative factory of the future, operating leaner and cleaner for a better future. The business area employs approximately 11,000 people at over 100 locations in approximately 53 countries. Visit go.abb/robotics

ABB Robotics Ventures is the strategic venture capital unit of ABB Robotics, part of ABB's corporate venture capital framework: ABB Ventures. Since its formation in 2009, ABB Ventures has invested around \$500 million in startups with a close fit to its robotics, automation, electrification and motion businesses. For more information, visit abb.com/ventures

LandingAI delivers cutting-edge agentic visual AI technologies that empower customers to unlock the value of visual data. With LandingAI's solutions, companies realise the value of AI and move AI projects from proof-of-concept to production. LandingAI's flagship product, LandingLens, enables users to build, iterate and deploy Visual AI solutions quickly and easily. LandingAI is a pioneer in agentic vision technologies, including Agentic Document



Extraction, which empowers the world's leading companies to transform unstructured visual data—from documents, images—into actionable intelligence. The agentic AI platform makes it possible to build and deploy powerful vision applications that drive efficiency and innovation at scale. Founded by Andrew Ng, co-founder of Coursera, founding lead of Google Brain and

former chief scientist at Baidu, LandingAI is uniquely positioned to lead the development of Visual AI that benefits all. For more information, visit Landing.ai

ABB Robotics
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www.abb.com

XYZ helps UK industry catch up with adopting automation

Realising the startling fact that the UK are 24th in a league of countries adopting automation, XYZ has made a conscious decision that its range of Vertical Machining Centres (VMC) and turning centres should offer the user the chance to integrate with automated machine tending systems.



The Mill Assist from RoboJob supplied from Hydrafeed helps companies to increase machine utilisation and drive to lights out machining.

This journey has started with the fitting of a RoboJob part loading system supplied by Hydrafeed, the Milton Keynes based supplier of automation equipment, to an XYZ 800 HD machining centre.

This collaboration between XYZ and Hydrafeed has allowed the creation of an interface for the Siemens controls to accept the robot system that, in turn, will allow users to tackle some of the challenges faced by a modern workshop. These include subjects such as becoming more efficient by adopting lights-out machining, addressing the skills shortage and deploying staff to carry out higher level tasks that generate more profit.

There is an array of options available with the RoboJob, including Mill and Turn assist systems for both VMC and Turning Centre applications, standard stacker arrangements, loading and unloading from pallets and the adoption of a tower system. The permutations provide the opportunity to not only select raw materials but increase flexibility within workshops by allowing the changing of items such as grippers for the robot and collet chucks on a lathe.

Martin Burton, MD of XYZ Machine Tools, comments: "It's important that as a company we offer new and existing customers the opportunity to increase production, become more efficient and help them to generate more profit. This work carried out at XYZ to create the interface between machine and automation gives us the ability to show users, at our showrooms, what is possible with the RoboJob. It will allow us to make users of our machines more aware of how automation is going to help the UK move up the league table of robot adopters."

XYZ Machine Tools Tel: 01823 674200
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Universal, sustainable and powerful

The new universal WTX drill range from CERATIZIT

Anyone that needs to machine a range of materials in their daily business will be grateful for anything that can make their job easier. One example would be the ability to reduce the range of drills needed to just a few essentials, provided that they can deliver sufficient performance in the most common materials. And that's exactly where the new WTX-UNI range from CERATIZIT comes in, offering reliable precision drilling in steel, stainless steel and cast iron while delivering outstanding cutting values. What's more, the drills are particularly sustainable and stand out thanks to their high flexibility and long tool life without stretching the budget.

In modern manufacturing, companies are faced with the challenge of efficiently and precisely machining a range of different materials. Frequent tool changes and the need to use specialised drills for each material inevitably lead to increased costs. "Our universal WTX-UNI drill range provides the solution for these problems. Thanks to its versatility and performance, it enables precision drilling in steel, stainless steel, cast iron and hardened steels up to 54 HRC. This reduces the selection of tools needed and increases the efficiency of the machining processes, which in turn lowers costs and boosts productivity," says Manuel Keller, technical product manager at CERATIZIT.

The new WTX-UNI range offers an entirely new geometry with patented features. "These tools are the first solid carbide drilling tools made from CT-GS20Y: our most sustainable upGRADE carbide grade to date," adds Manuel Keller. They enable a significant increase in performance and deliver even better cutting data as well as a longer tool life compared to their predecessors.

The WTX-UNI has two guide lands and is available with diameters ranging from Ø3 to 20 mm in hole depths 3xD and 5xD, with or without thro' coolant in each case and in shank variants HA/HB/HE. The patented end geometry with convex main cutting edge and a point angle of 140° ensures high tool stability combined with excellent self-centring, thus enabling outstanding cutting data. Together with the modern DPA74S coating and the expanding flute design, chips are evacuated without obstruction and reduce the risk of chip jams or tool breakage.

"The version with four guide lands is called WTX-Quattro. These drills are always equipped



with coolant holes and are available in hole depths of 5xD, 8xD and 12xD," says Manuel Keller. One special feature for the 8xD and 12xD versions is that the point angle, which is 140° in all other versions, is changed to 135° and only the top section is equipped with four guide lands and the DPA74S coating. "Of course, the WTX-Quattro also comes equipped with all the features of the other products in the WTX-UNI range," adds Manuel Keller. If, despite the wide range of tool options available, process-specific solutions are still required, custom special tools, such as stepped drills, can also be implemented with ease based on the WTX-UNI.

The WTX-Deep UNI deep hole drill offers maximum process security and reliability thanks to its new geometry and improved tool stability, which minimise tool breakage and rejects. The polished chip spaces with expanding flute design also provide an improved chip flow, permitting higher cutting values compared to the predecessor product. Four guide lands ensure high drilling and positional accuracy and reduce hole deviation to a minimum. The head is also coated with the innovative, high-performance DPX74-M coating, which significantly increases tool life.



The WTX-Deep UNI range of deep hole drills can be used universally with a wide range of materials. The range held in stock covers hole depths of 16xD to 50xD and is available in the diameter range of Ø3 to 14 mm or Ø3 to 8 mm, 40xD and 50xD. Imperial dimensions are also available in the global portfolio.



With the 3xD and 5xD variants in the new WTX-UNI range, there are also high-performance pilot drills available which have been perfectly adapted for use in combination with WTX-Deep UNI.

The WTX-UNI range of solid carbide drills combines the high performance of a versatile premium drill with the sustainability of the upGRADE substrate CT-GS20Y. This provides both economic and environmental benefits and also includes the specific Product Carbon Footprint (PCF).

CERATIZIT UK & IRELAND Ltd
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New range of solid carbide radius endmills enhances breadth and depth of MSC Edge tooling range

MSC Industrial Supply Co. UK, has expanded its flagship MSC Edge tooling range with the launch of a new series of solid carbide radius end mills. Available in 2 and 4-flute variants, ranging in size from 3 mm to 20 mm and with various radius sizes, the optimised design delivers exceptional metal removal rates while reducing tool wear.

The fine-grain solid carbide substrate, combined with a high-temperature, heat-resistant AlCrSiN coating, offers the ideal combination of high performance and maximum productivity.

This range extension follows the successful first-phase launch of MSC Edge in early 2025, which comprised of solid carbide holemaking and milling tools. Designed by engineers for engineers, the brand ambition for MSC Edge is to offer a range of multipurpose tools capable of performing 80 percent of machining operations, using just 20 percent of the tools in order to help machinists streamline their tooling processes and save both time and money.

The new MSC Edge radius end mills can be used across a wide variety of machining strategies, including more complex operations, such as trochoidal milling. While the 2-flute range is suitable for non-ferrous metals, the 4-flute tools are designed for use across multiple materials.

All tools feature a cylindrical shank, compatible with hydraulic chucks, collet chucks and heat-shrink toolholding systems.

In addition, MSC has reduced the price of several larger tools within its original MSC Edge portfolio, reaffirming its commitment to delivering exceptional value without compromise. The company is also offering a 30-day money-back guarantee for any users who experience premature tool wear when using the range within its recommended parameters.

Gareth Evans, head of engineering and business innovation at MSC Industrial Supply Co. UK, comments: "The launch of our MSC Edge range has been met with great enthusiasm from machinists across the country. While we chose to keep our first phase limited to a small number of tools, we've been inundated with questions about 'what's next?'"

We listened to feedback from our customers and prioritised the launch of radius end mills. This will help many existing MSC Edge users fill a gap in their tooling, while also providing a robust and reliable solution for those tackling more complex machining strategies at a competitive price. We plan to expand the range further throughout the year, with a new series of ISO turning tools due out in the autumn."



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Revolutionary new SLIK-SOLID end mill line

TaeguTec has launched its SLIK-SOLID end mill line, a significant advancement in machining technology. This innovative product features UHP 4 type solid end mills with the TT5520 grade coating, offering improved performance and extended tool life based on TaeguTec's expertise.

The SLIK-SOLID line addresses critical machining challenges through sophisticated engineering innovations. The UHP 4 end mills incorporate improved chip gullets and flute geometries that enable smoother chip evacuation, which is essential for maintaining optimal cutting conditions. These tools feature smooth and excellent machinability by applying unequal flute spacing and combining this with optimised variable helix



angles, reducing vibrations under demanding machining conditions with high cutting loads.

The enhanced design delivers superior shoulder machining performance, achieving better surface finishes under higher cutting conditions while maintaining stable machining without tool breakage, even during full slotting operations of 1.5XD or higher. This exceptional stability represents a significant improvement over conventional end mill designs and enables manufacturers to push cutting parameters while maintaining impressive performance levels.

Central to the SLIK-SOLID line's performance advantage is the new TT5520 PVD coating technology. This advanced coating system features excellent abrasion resistance through the application of a sub-micron substrate combined with an anti-abrasion and oxidation-resistant PVD AlCrN-coated layer. The single-direction crystal-aligned AlCrN layer provides enhanced protection against wear and thermal degradation, significantly increasing tool life when machining heat-resistant super alloys and various steel grades, including alloy, carbon, mould and stainless steel applications.

The SLIK-SOLID line features two primary configurations to meet diverse machining needs.

The standard UHP 4 square end mills deliver optimal performance for general milling applications. The 4-flute medium flat geometry, combined with a variable helix angle design, empowers the UHP 4 to excel in applications that require high material removal rates while maintaining precise dimensional control.

For applications requiring enhanced surface quality and complex geometries, the UHP 4R corner radius variants are the preferred choice. The corner radius design reduces stress, prevents edge chipping and facilitates smoother cutting during finishing operations. Available in various radius options ranging from 0.3 to 3.0 mm, these tools provide flexibility for different part geometries while maintaining the same advanced coating and geometric features as the flat end mills.

The square end UHP 4 series is available in diameters from 2 to 25 mm with an overall length from 42 to 140 mm, depending on the diameter selected.

TaeguTec UK Ltd
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Exchangeable-head PCD milling cutters

The Polycrystalline Diamond (PCD) milling programme manufactured by German tool manufacturer Horn has gained the new DM50 series, an exchangeable-head milling system for economical machining of aluminium that is particularly well suited to applications where cycle times are critical. The design enables soft cutting and high surface quality to be achieved. Availability in the UK and Ireland is through subsidiary company Horn Cutting Tools Ltd, Ringwood.

With the DM50, Horn has introduced a tool concept that offers low wear, high versatility and cost effectiveness. The main wear zone of the head as well as the PCD inserts can be replaced, as can an intermediate sleeve that enables different tool lengths. The system is therefore a tool solution that can be customised to numerous applications, while at the same time reducing operating and service costs.

Thanks to their adaptability, the cutters can be converted quickly to inserts with different corner radii and to the desired cutting height. The combination of cutting edges on the face and periphery is tailored to different application requirements and milling techniques. Precise positioning on head changeover, without the need to enter any offset into the machine tool control, guarantees accurate milling while speeding setup.

Horn Cutting Tools Ltd, Ringwood, is the wholly owned UK subsidiary of Horn S.A. Luxembourg, a leading European supplier of grooving tools and a leader in precision grooving technology. The company was incorporated in the UK in 2008, having previously traded as Horn UK since 1995.



Horn's new exchangeable-head PCD milling system.

Horn Cutting Tools Ltd
Tel: 01425 481800
Email: info@uk.horn-group.com
www.phorn.co.uk

Walter Solid carbide drill is Supreme

With the Drivox-tec™ Solid carbide drill DD170 Supreme, Walter has launched a new 'holemaking icon' to the market. Like its 'iconic' predecessor, the DC170 Supreme, the new DD170 Supreme has also been designed as a premium problem solver.

Perfect for holemaking in steel and cast iron, the Drivox-tec Solid carbide drill DD170 introduces technical improvements that are currently unique. The primary improvement is the new Krato-tec™ multi-layer coating. Walter has already introduced this in other drill families with remarkable success. This delivers tool life improvements in the region of 50 percent and more, depending upon the specific application.

The revised point geometry of the Solid carbide Drivox-tec DD170 Supreme holemaking series has an equally positive effect. Incorporating a larger clearance angle on the internal side than on the external side with a raised drill point, the DD170 Supreme improves the positioning accuracy. Furthermore, these geometry advances reduce axial forces and increase the hole quality, precision and machining performance.



The patented groove design has also been optimised. With a flatter entry point, the drill improves process stability, especially when machining soft materials like mild steel, as it

minimises material sticking and improves swarf evacuation. In addition to optimising the cutting profile, Walter has also increased the number of flutes. With twelve grooves instead of eight, the DD170 Supreme can now be reground more frequently. This significantly increases both the service life and sustainability of the Solid carbide drill bit.

According to Walter, the new range demonstrates high process reliability in demanding applications such as cross holes and inclined exits. This is credit to the high wear protection of the Krato-tec coating, which makes the DD170 Supreme the new benchmark for high-performance solid carbide drilling. The Tübingen-based company offers this premium new drill for the highest quantities and drilling volumes, without Pilot drilling up to 12XDc, with diameters from 3 to 20 mm. Special tools and dimensions with shorter delivery times are also available via Walter Xpress.

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Turning challenges into opportunities with Witte QuadroVac

At Thame Workholding, our role is not simply to supply products, but to provide solutions. For over a decade, we've worked alongside C&K Precision Engineers Ltd, supporting them with tooling and systems that help them tackle complex machining challenges.

When C&K took on one of their more challenging recent projects, machining oversized lead shielding plates for the medical industry, they came to us for guidance. With the Witte QuadroVac modular vacuum clamping system, we delivered a solution that not only made the job possible but also profitable.



Tough workholding challenge

C&K Precision, a second-generation business with over 50 years of expertise, specialises in subcontract machining for industries where accuracy is critical. Its latest project required producing large lead plates, up to 800 x 600 mm, to be used as shielding in medical equipment. These plates presented a serious challenge:

- They were heavy and soft, making them difficult to grip without distortion.
- They required machining on multiple sides, including edges, undercuts and through-holes.
- Existing solutions, such as clamps or BlueVac mats, which C&K had relied on for more than 20 years, were unsuitable for parts of this size and weight.

Without a new approach, the job risked becoming slow, messy and commercially unviable.

As Matt Kelsall, director at C&K Precision Engineers Ltd, explains: "We quickly realised that traditional methods weren't going to work. Clamping would have taken too long, and multiple setups would have killed profitability. We needed something versatile and secure and we knew Thame Workholding would help us find it."

Identifying the right solution

Having supported C&K for many years, Thame's technical sales team understood their requirements and the risks of the job. They carefully reviewed the machining stages, which included:

- Milling the first face of the plate flat.
- Machining all four edges.
- Creating undercuts on selected parts.
- Drilling and pocketing, with through-holes that required clearance.

The solution needed to provide full access to the workpiece, adapt to different geometries, and hold securely without damaging the lead. Thame's recommendation was the Witte QuadroVac modular vacuum clamping system.

How QuadroVac made it possible

The QuadroVac is designed for flexibility. Built on a pod-based principle, it allows individual vacuum pods to be repositioned, removed or blanked off depending on the part design. This meant C&K could adapt the setup to each plate without compromise.



In practice, the process worked as follows:

1. The lead plate was loaded directly against the locating stops for repeatability.
2. The QuadroVac system created a secure hold across the whole surface, even though the plates were unevenly cut.





3. Stops could be rotated out of the way, giving complete access to the external profile.
4. For through-holes, blanking screws were used to isolate areas of the table, preventing vacuum loss or table damage.
5. With the plate secured, C&K could machine the first face, all edges and undercuts in a single setup.

This reduced handling, eliminated the need for multiple jigs and ensured dimensional accuracy throughout the job.

"The QuadroVac let us do everything in one go," says Matt Kelsall. "Undercuts, holes, profiles, all without clamps or extra fixtures. That efficiency is what made the contract viable."

Why Thame Workholding recommends Witte QuadroVac

Thame recommends solutions that it trusts to deliver. The Witte QuadroVac stands out because of its adaptability and consistent performance across a wide range of applications.

Key advantages include:

- **Outstanding grip:** outperforms most vacuum systems on rough or uneven surfaces.
- **5-side access** to components, including through bores.
- **Adaptability:** pods can be repositioned or blanked off quickly.
- **Accuracy:** excellent control of thickness and reliable pull-down force.
- **Surface protection:** PVC pods prevent marking on delicate materials.
- **Efficiency:** upper and lower chamfers or radii can be machined without extra setups.
- **Flexibility:** suitable for both horizontal and vertical machining.

The system is powered by Witte's proven vacuum technology, which includes liquid ring pumps that automatically recirculate coolant, a vacuum pressure of up to 50 mbar, air chillers to prevent overheating and a patented condenser that cleans incoming air for long-term reliability.

The results for C&K Precision

By investing in the QuadroVac, C&K Precision:

- Secured large lead plates without distortion or risk of marking.
- Reduced operations to a single setup, cutting handling time dramatically.
- Increased profitability and competitiveness by streamlining production.
- Delivered the project successfully, winning a contract they could not otherwise have taken on.

Matt Kelsall states: "We've worked with Thame Workholding for many years and their advice gives us the confidence to take on challenging projects, knowing they'll help us find the right solution. QuadroVac is a great example of that partnership in action."

Experience the solution yourself

You can now view the C&K Precision case study video on the Thame Workholding YouTube channel, where Matt Kelsall demonstrates how the QuadroVac was used and the results it delivered.

Or book a visit to the showroom in Long Crendon, Buckinghamshire, where you can explore Thame's full range of workholding systems, get hands-on with the technology and talk directly with its experts about your own applications.

Thame Workholding is here to make sure your workholding challenges are solved. Whether you need vacuum, magnetic, zero-point, or chuck jaw systems, their team has the knowledge and solutions to keep your machining precise, efficient and profitable.

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Boost 5-axis productivity with the new Kurt PFA620 Air Vise

In the fast-paced world of precision machining, speed, accuracy and repeatability are everything. That's why Kurt Workholding, the trusted name in clamping technology, has once again raised the bar with the new PFA620 5-axis Pneumatic Vise.

Built for 5-axis, ready for automation

The Kurt PFA620 is a revolutionary air-actuated self-centering vise designed specifically for modern 5-axis machining centres. Compact, powerful and automation-ready, it's ideal for shops looking to streamline setup times without sacrificing precision.



The new air vise was recently featured as part of a fully automated, lights-out work cell at the Yamazen Open House in Elk Grove, Illinois, USA. It can be mounted on a custom base directly to the platter of a Brothers Speedio U500Xd2 with an integrated robot, providing machine tending by picking raw stock and placing finished parts using a drawer system.

Watch Kurt Workholding Air Vise Preview:
https://www.youtube.com/watch?v=jBbdB_p3EBc

"The automated access door allows the robot to move parts in and out of machine without an operator present," explains Andrew Justin, Kurt Workholding sales engineer. "You can load stock into the drawer system and let the machine run for hours unattended until stock is depleted. Once depleted, you replenish the raw stock and start the cycle over again. The PFA620 mounts seamlessly to any 5-axis platter both through the body and with a custom adapter plate if it is necessary.

The PFA620 can be integrated into a rotary union with pneumatics so that there are no external air lines. All the pneumatics are captured within the base plate and vise. This allows for maximum access on five sides while

not potentially damaging external air lines. New Kurt air vise models will feature porting on the bottom of the vise to eliminate exposed air lines. Kurt custom engineered workholding can design a vise mounting plate perfectly fit to your machine or application.

Large and small parts? No problem

Unlike typical pneumatic vises, the Kurt PFA620 offers manual full-stroke adjustment via a hex screw and handle giving machinists the freedom to quickly adapt to parts of varying sizes. Once set, the vise uses a ¼-inch pneumatic stroke to apply consistent clamping force, ensuring repeatable accuracy for lights-out operation. You can dramatically reduce setup and changeover times, especially in automated cells.

Easy to configure one or more vises

Whether you're running a single vise on the platter of a 5-axis machine or need a high-density multi-vise setup in a larger CNC machine or several units mounted side-by-side on a trunnion, the PFA620 scales easily with your operation. Its compact size and automation-ready design make the vise a great investment for a shop looking at expanding.

Versatile automation options

Designed with turnkey automation in mind, the new air vise can be set up inexpensively using a Kurt FLR and a hand or foot switch to run with remote actuation in a semi-automated mode. Or the new vise can run fully automated using the FLR and a machine tool controller, PLC or robot, for lights-out manufacturing with robotic machine tending automation.

Quick-change, machinable jaws

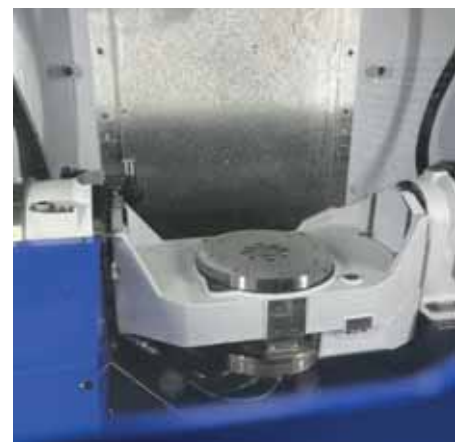
Flexibility is at the core of the PFA620's design. The vise includes quick-change jaws that snap on and off without tools. Serrated and dovetail jaws are also available for the air vise.

Solid holding power from Shop Air

Don't underestimate the clamping force, this compact powerhouse delivers up to 2,000 lbs of force at just 110 PSI. That's more than enough to hold your toughest materials securely during aggressive 5-axis cuts.

Designed for true 5-sided access

With a 3.5-inch rise, the PFA620 provides



excellent clearance for full 5-sided machining. Spend less time flipping parts and more time cutting metal.

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Workpiece clamping technology



Flexible and versatile clamping device

The new, versatile SCHUNK ROTA THW3 2+2 power lathe chuck with centrally compensating workpiece clamping handles all workpiece geometries quickly and flexibly. Users benefit from increased productivity and reduced maintenance effort and they are equipped with a single lathe chuck for all machining applications.

Contract manufacturers and machining companies know how important process-stable and versatile clamping devices are. Especially for batch size 1 and high part variability in custom production, short setup times and flexibility are essential. Since modern turn/mill centres perform turning and milling simultaneously, a reliable and flexible clamping device is indispensable for precise workpiece machining particularly when geometrically undefined or irregular parts need to be machined in a second clamping operation. SCHUNK now provides an innovative clamping concept for these demanding requirements with the new ROTA THW3 2+2 power lathe chuck. This 4-jaw lathe chuck features two independent jaw pairs with subsequent centrally compensating workpiece clamping, enabling safe and reliable clamping of freeform parts, castings, or geometrically undefined



workpieces. Thanks to the patented sealing, companies can confidently use this 2+2 compensation lathe chuck in harsh environments with dirt and fine chips. In addition, users benefit from consistently high clamping forces and significantly extended maintenance intervals, resulting in increased productivity without compromising quality.

Four jaws for maximum flexibility

Following the manual lathe chucks, SCHUNK now introduces a 2+2 jaw compensation lathe chuck for power lathe chucks, which is particularly indispensable for automated applications. The new power lathe chuck provides centrally compensating workpiece clamping for all workpiece geometries, making it an ideal solution for complex parts on lathes. This flexibility allows parts to be completed on lathes that previously required an additional milling operation. The integrated jaw quick-change system enables users to adapt the chuck quickly and easily to new clamping tasks, resulting in a significant increase in productivity. Thanks to the sealing, the maintenance effort is reduced, lowering lubricant consumption and minimising used grease making SCHUNK a key contributor to resource-efficient manufacturing processes.

SCHUNK will offer the flexible lathe chuck from mid-2026 in sizes 230, 265 and 315 mm in diameter.

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The many benefits of zero-point workholding

While zero-point workholding has become popular, we know many manufacturers are not using this type of system and the prospect of making the change can be daunting.

What is zero-point workholding?

Zero-point workholding refers to a workholding system where the designated reference point does not move, which is accomplished by using a zero-point base. The reference point is at the centre of the zero-point base. Once the base is installed on the machine tool table, it does not move. Various top tools, including vises, ER collet chucks and top pallets, are loaded into the base.

What are the benefits?

- Reduced changeover time by eliminating manual adjustments.
- Reduced machine tool downtime = improved profitability.
- Increased accuracy and repeatability.
- Increased flexibility: utilise the top tool that matches your workpiece size and shape.
- Eliminating misloads and setup errors.
- Eliminating unnecessary operations.

What makes a good zero-point workholding system?

The best zero-point workholding systems have high repeatability and holding forces. They will also feature a wide array of options to provide the most flexibility. Luckily, this is precisely what Mate's workholding is made to do.

Its DynoLock™ zero-point bases deliver best-in-class repeatability (0.005 mm/0.0002") and holding force (26 kN/6000 lbs). The Mate DynoGrip™ self-centring vises also feature best-in-class repeatability (0.010 mm/0.0004") and clamping force (34 kN/7,650 lbs).

Mate DynoGrip self-centring vises also offer many features to improve versatility, such as quick-change jaws that take seconds to switch and our easy-to-install centre jaw that doubles your capacity in less than five minutes. Mate's DynoGrip ER collet chucks, DynoGrip top pallets, and DynoGrip machinable hard jaws further the versatility of your zero-point workholding by allowing you to grip parts that don't ordinarily fit well in a vise.

Six benefits of transitioning from a fixed jaw vise

Changing your mindset

With a fixed jaw vise, using the fixed jaw as the reference point in the CNC program is common.



Doing so allows the workpiece datum to match the fixture reference point. Since the fixed jaw doesn't move, you don't need to worry about repeatability.

On a zero-point system and a self-centring vise, the fixture reference point cannot be on the vise jaw because the jaws will be in different locations for each workpiece. So, we must set the fixture reference point to something else, typically the centre of the zero-point base. Since the workpiece datum is different from the vise jaws, repeatability is now critical. Thanks to Mate DynoGrip vises and DynoLock bases offering best-in-class repeatability at 0.0004", 0.010 mm and 0.0002", 0.005 mm, respectively, you won't need to worry about probing your workpieces unless your tolerances are below 0.0004".

Machining process updates

Understanding this different approach is critical to your success when making the transition. It also provides insight into these necessary updates to your machining processes:

Update your CNC programs

- Update offsets.
- Check tool paths for improved efficiency.
- Check tool paths for clearance issues or collisions.
- Add workpiece probing if required.

Review your cutting tools

- Check all tool lengths and tool holder clearances.
- When possible, use shorter tools for less chatter and improved surface finishes.
- Review dimensioned drawings and tolerances.

Review your workholding options

- Zero-point bases offer a wider variety of top tool options. Don't limit yourself to just self-centring vises. See if other options provide efficiencies.
- Get the most out of quick-change jaws and review where you may use machinable jaws.

Six benefits of transitioning from a fixed jaw vise

Changing from fixed jaw vises to zero-point bases and self-centring vises is an achievable goal and can benefit your operations tremendously. When done right, you can expect to see a quick return on investment in the following ways:

- Quicker setup and changeover times.
- Shorter cycle times.
- Improved cutting tool life.
- Improved surface finishes.
- Reduced scrap and rework.
- Improved productivity.

When you are ready to make the transition Mate can help, from the best-in-class performance of all Mate workholding products to its expert application specialists here to answer your questions. With its 100 percent customer satisfaction guarantee, Mate workholding can solve your problems.

UK Agent:

Leader Chuck International

Tel: 01827 700000

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Hydraulic chucks use ER driven tools for versatile live tool holding on lathes

"The best of both worlds" is how German tooling manufacturer Gewefa describes its innovative M96 and M96+ hydraulic chucks, which fit into any ER-driven tool quickly and effectively, converting it into a high-precision hydraulic holder. Availability in the UK and Ireland is through subsidiary company Gewefa which offers the products from stock in Germany.

Avoiding the limited clamping force, runout issues and lengthy tool change times associated with mechanical ER holders, the versatile M96/M96+ products give the machinist all the benefits of hydraulic clamping. They include higher and more consistent all-round gripping force, effective vibration damping, extended tool life, higher accuracy and improved surface finish on the machined component, all at a much reduced cost compared with standard hydraulic chucks.



The Gewefa M96+ hydraulic chuck fits into a standard ER holder with an external thread.

Moreover, with the chucks simply mounted in the output shaft of the ER driven tool and twisted to seal, users can enjoy quicker and easier tool changes, saving time and increasing productivity.

The M96 is suitable for driven tools with an internal thread, while the M96+ is for driven tools with an external thread and is secured to the live tool with a lock nut. The hydraulic chucks are available for sizes ER16, 20, 25, 32 or 40, currently only the M96, accommodating tool diameters from 5 mm to 25 mm.



The Gewefa M96 hydraulic chuck is for use with driven toolholders that have an internal thread..

Gewefa UK was founded in 1991 and rapidly established itself as a leading independent supplier of toolholding and allied equipment. Its mission is to be a steadfast partner to its customers, using its technical expertise and quality products to maximise their production efficiency with innovative tooling solutions. It caters to all major metal, composite and wood machining industries, including military and civil aerospace, automotive, medical and die and mould.

Gewefa are leaders in the design and manufacturing of special toolholders, whether it be a bespoke item such as a hydraulic expanding mandrel specific to the customers requirement, or a long reach holder guaranteeing concentricity and stability. Its vast product range consists of all internationally recognised spindle adaption standards, coupled with the expansive range of Gewefa toolholding mediums including shrink induction chucks, hydraulic chucks, side-lock holders and face-mill adaptors

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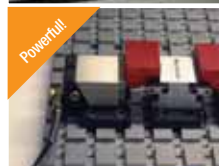
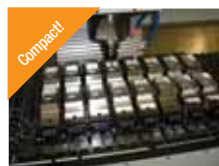


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Reaching peak performance with Vericut and Vericut Force next-level machining

When things go smoothly, everything falls into place. Max Hilscher GmbH is a striking example of how the right digital strategy and tools can drive a complete cultural shift in manufacturing. The automotive and aerospace supplier has, since last year, been relying not only on automated parts production, but also on a fully digital process chain with Vericut and Vericut Force from CGTech. The results: no more crashes, significant time savings and a production team working with greater calm and confidence.

Machines are running, morale is high and there are no more urgent calls from the shop floor. Step into the production hall at Max Hilscher GmbH and it's immediately clear that something has been done right. It wasn't an easy step but it was a determined one: the introduction of Vericut and Vericut Force didn't just change how things are manufactured, it transformed the entire mindset of the company.

Christoph Hilscher, who has managed the family business for eleven years, puts it plainly: "We've bought many machines and software tools over the years, but the feedback from production has never been as positive as it is now. People come up to me and thank me for making this investment."

Parts ranging from single items to medium batches are machined on automated Hermle machining centres. For about a year, the company has relied on end-to-end process simulation with Vericut and feed rate optimisation using Vericut Force.

"A machine crash can easily cost five figures," says Christoph Hilscher. "If you're manufacturing complex milled parts for the automotive and aerospace industries, you simply can't afford those kinds of mistakes." That's why Max Hilscher GmbH chose to digitally safeguard its production processes.

Max Hilscher GmbH is a family-run business with over 80 years of history at its site in Dornstadt, near Ulm. What started as a traditional workshop has grown into a cutting-edge manufacturing company that sets technological benchmarks for flexibility and quality.

With 55 employees, the company produces up to 200,000 individual parts per year, from



one-offs to small and medium series, often highly complex and demanding.

Tobias Konrad, machinist and lead CAM programmer, handles hundreds of NC programs per year, personally creating between one and six per week, depending on part size.

The materials processed include aluminium alloys, various steels and stainless materials.

"In a volatile market with highly variable batch sizes and last-minute customer demands, good machines alone aren't enough, you need a system that thinks with you," says Christoph Hilscher. That's where Vericut comes in.

Machining at Hilscher is far from simple. With a focus on aluminium components, tolerances are tight, geometries are complex and batch sizes change frequently. CAM programming is done with SolidCAM and production runs largely automated, ideally around the clock.

The issue, as Tobias Konrad explains, was clear: "Our CAM simulation didn't provide complete security. Too often, motion data was missing, or we weren't sure if the post-processor was interpreting the NC program correctly.

"Especially with tight tolerances, when there's just a tenth of a millimetre clearance in the vice I need absolute confidence."

Vericut simulates the finished NC program based on the digital twin, including all machine movements, setups and tool changes.

The decision to use Vericut Force was made deliberately, not as a nice-to-have, but as a strategic necessity. Force delivers realistic optimisation that achieves measurable time savings while reducing the strain on both tools and machines.

Vericut Force is a physics-based optimisation module that calculates cutting parameters not generically, but based on real material properties, tool specifications and machine dynamics. Instead of relying on fixed feed rates, Force analyses chip thickness in every cutting situation and adjusts feed accordingly to maintain a constant chip load.

At Max Hilscher GmbH, the results speak for themselves. Depending on part geometry and material, machining time can be reduced by 5 to 40 percent.

"For us, Force is a real gamechanger," explains Tobias Konrad. "Programs are more stable, we get fewer queries from production and machine operators are noticeably more relaxed."

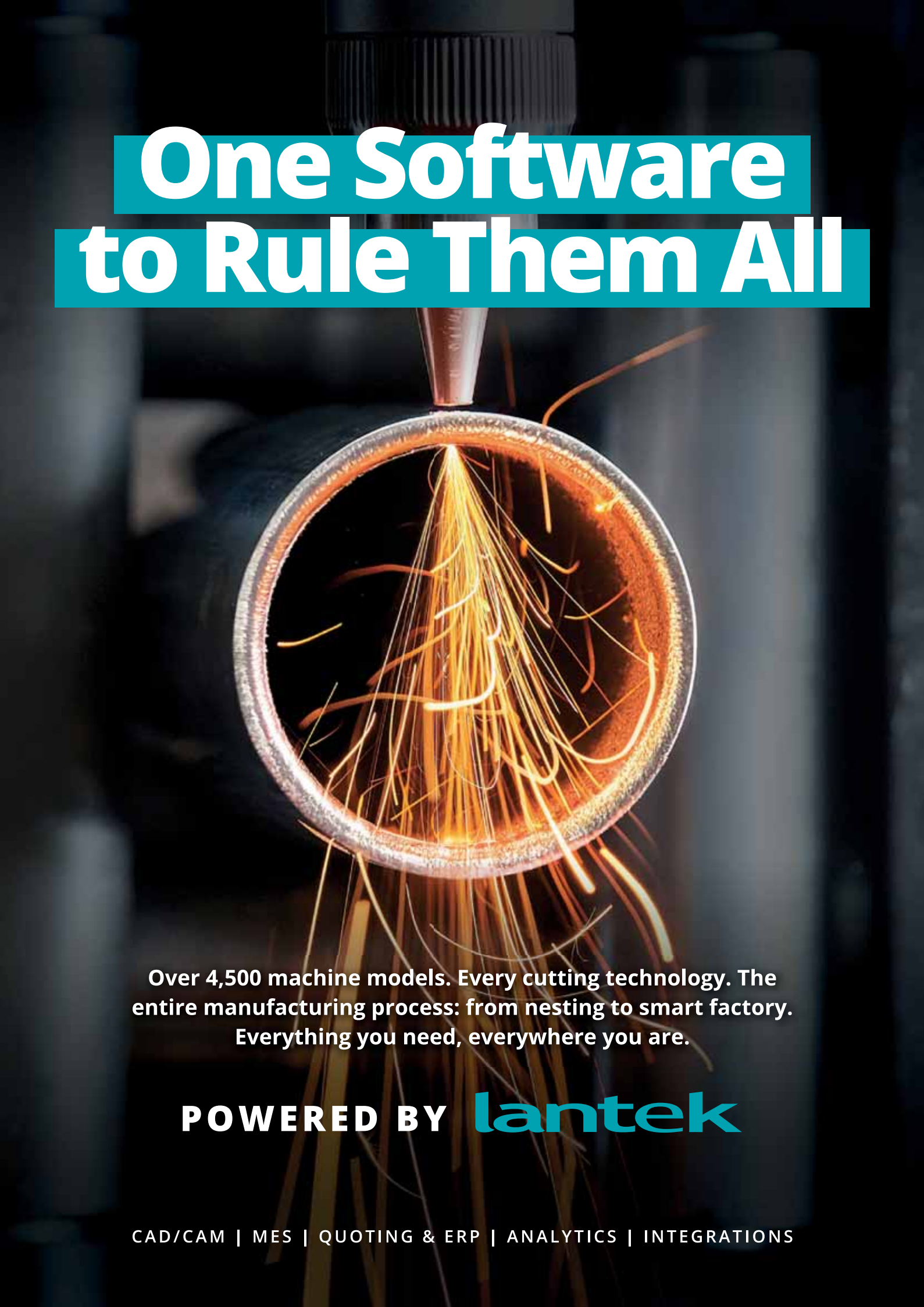
At Hilscher, the optimisation tool was ready to go in no time and its benefits were clear from day one.

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New release of point cloud inspection software

An intuitive point cloud inspection package, FOCUS 2025 R1, has been integrated into the software suite offered by portable measuring arm supplier and Coordinate Measuring Machine (CMM) and laser scanner manufacturer LK Metrology. Branded to align with other products in the company's range, the easy-to-use, 3D digital inspection software provides users with part-to-CAD comparisons and advanced feature inspection. It includes the latest laser scanner driver NM API 5.0 R1 installer, ensuring optimal compatibility between the software and laser scanning hardware. New also is modernisation of the file menu to a backstage interface, which provides clear visibility of a large set of recent files and their locations.

The software is designed to seamlessly drive LK Metrology's class-leading handheld H120 laser scanner and FREEDOM measuring arms. The clear Graphical User Interface (GUI) makes users feel at ease immediately, providing direct access to the most frequently used functions. Inspection is guided by an intuitive ribbon taskbar, which progressively leads the user through each stage of an inspection job. The process encompasses nominal part definition, including feature creation and extraction, Geometric Dimensioning and Tolerancing (GD&T), handheld measurement through scanning and probing, alignment of the measured part and inspection reporting.

FOCUS supports a range of CAD formats, from neutral standards such as STEP and IGES to native formats including CATIA, Creo, NX, SolidWorks, ACIS, VDA-FS and Parasolid. By accommodating such a comprehensive library of formats, the software enables a seamless flow of information across design, manufacturing and quality functions. Tightly integrated data acquisition and intelligent processing and reporting are provided, with direct access to workflow selection, customisation and automation to facilitate setup and job execution. Results including deviation analysis data are presented in clear graphical or tabular reports,

making them easy to interpret and share among operators, managers and suppliers.

Further enhancing the software's capabilities is the ability to analyse virtually unlimited point clouds, even those with over 100 million points, together with comprehensive point cloud tools including the proprietary FUSE algorithm, which can generate extremely high-quality polygon meshes automatically by intelligently leveraging scanner metadata. Advanced feature detection routines automatically identify and analyse geometric elements, ranging from simple holes and slots to complex fir-tree and T-stud features. The software also supports tactile probing and a leapfrog function to inspect very large parts by moving the measuring device. Virtual assembly functionality allows digital copies of reference parts to be used to build an assembly with a CAD model or point cloud data, saving material and time by avoiding expensive templates, fixtures and lengthy physical assembly builds.

Automation is a key benefit of FOCUS, which incorporates standard functionality to support non-stop execution of repetitive inspection tasks. Macro-based recording of actions requires no specific programming skills and can automate the entire inspection workflow, from nominal CAD import to final reporting. The software also offers a wealth of functionalities for specialised applications, such as the Airfoil Inspection module, which allows precise calculation of various aerofoil profile measurements from cross-sections and can generate dedicated reports.

The versatility of operation provided by the software benefits a range of industrial and non-industrial sectors. In the aerospace and defence sector, it can be used for quality control of landing systems, engine blades, structures and Maintenance, Repair and Overhaul (MRO). For automotive applications, it is suitable for press and body, benchmarking, aerodynamics, ergonomics, styling and trim. It also serves general manufacturing, heavy industry such as rail, shipbuilding and construction, power generation including renewable, healthcare and consumer sectors.

Dave Robinson, LK's marketing manager comments: "As industries continue to evolve towards smarter and more connected manufacturing, the role of digital inspection becomes ever more important. FOCUS 2025 R1 reflects not only this trend, but also our philosophy of continuous innovation.

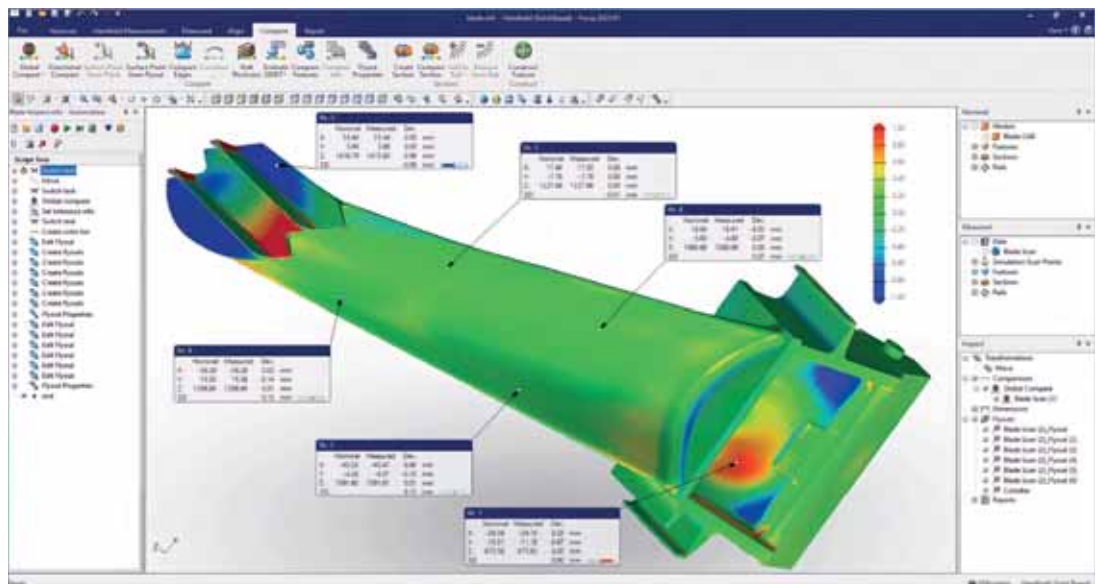
"We've listened closely to our customers and invested in capabilities that simplify complex inspection, while ensuring compatibility with the latest scanning technologies. The result is a software release that is not only powerful but also intuitive, designed to help our users maximise their productivity."

LK Metrology Ltd

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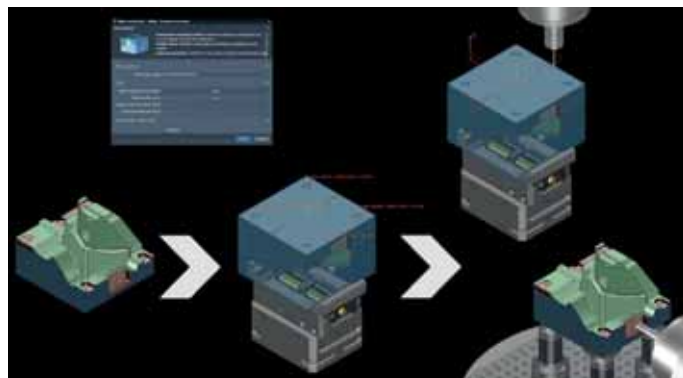
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Tebis launches its new CAD/CAM process solution: Tebis SmartOps Technology

Tebis has introduced its revolutionary SmartOps Technology, an innovative solution for automating design and CAM processes, specifically developed to address the requirements of single-part manufacturing. Users benefit from a unique combination of speed, flexibility and process reliability, providing a genuine shortcut to success thanks to consistently reproducible results.

Single-part manufacturing demands rapid, precise solutions both on the machine and throughout the CAD/CAM process. Tebis SmartOps automates recurring work tasks, significantly reducing the workload on teams. The result: reduced time pressure, increased process reliability, safer manufacturing and enhanced flexibility for employees.



Working with Tebis SmartOps: Automated, flexible, simple and fast

Tebis SmartOps Technology automates CAD/CAM processes through intuitive, dialogue-driven workflows that run nearly autonomously. Users maintain full flexibility to make manual adjustments when needed. Its user-friendly interface speeds up NC programming, while Tebis' end-to-end solutions simplify and automate subsequent production steps.

Modular and scalable: Ideal for all manufacturing needs

SmartOps supports custom configuration: For instance, individual functions can be automated or combined into powerful sets. Typical process steps, such as importing CAD data, measuring blanks, positioning clamping devices, selecting materials and machines, setting measurement points, creating measuring paths and generating CAM programs, can be linked intelligently and executed efficiently, even by less experienced users. Overall, the complete set of Tebis function modules can be used for SmartOps Technology.

Flexible automation: No scripting or programming language knowledge needed

Tebis SmartOps Technology sets new standards for user-friendliness and flexibility. All tasks are performed within the familiar Tebis environment. Dialogues are fully customisable, with parameters that can be adjusted at any time. Machines, tools and part variants can be quickly and easily exchanged.

Virtual process libraries: A hub for knowledge management

SmartOps build on the proven Tebis process libraries, which include a comprehensive repository of machines, tools and manufacturing strategies. This foundation enables the systematic application of a company's manufacturing expertise, ensuring safe, automated and transparent production processes.

Christian Sellerer, head of mechanical manufacturing at Christian Karl Siebenwurst GmbH & Co. KG, states: "Tebis used SmartOps to continuously prepare and program one of our mould manufacturing slides for a milling application. I have to say, this experience makes me eager for more. We see great potential here and expect that SmartOps will help us simplify and improve our CAD/CAM processes. We look forward to learning even more about this new, promising and transformative technology at our workshop with Tebis."

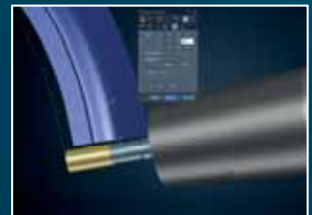
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Kerf streamlines production success for M&J Europe

The demise of the coal and steel industry and the 1980s recession delivered a gloomy outlook for millions in the UK, but every cloud has a silver lining. For ex-coal engineer Mike Garland, a relentless work ethic and an engineer's attitude to delivering creative solutions were the foundation blocks that started M&J Europe Ltd.

Started in 1990 by Mike, his wife, Jasmin and their son Chris, M&J Europe reclaimed rollers and conveyors from closing coal mines, refurbished and repurposed them and sold the equipment to power stations, steel plants and furniture manufacturers among others. The business has flourished ever since and in the past two years, M&J Europe has invested over £3m in buildings, plant and equipment with the most recent acquisition being a Lincoln Electric® Linc-Cut™ 1530A 6 kW fibre laser machine from Kerf Developments.

In the 1980s, the government offered a £40 a week allowance scheme for anyone starting a new business. Mike took advantage of the grant and began M&J Europe from home, selling solutions from the back of a Ford Escort van. The company now has a turnover above £7.5m and employs more than 45 highly skilled engineers who design, develop and manufacture production lines for some of Europe's leading brands. Working with household brands as diverse as Warburtons, Braces and Dominos Pizza in the food industry to OEMs in the medical, oil & gas, furniture, automotive, FMCG, aerospace and defence sectors, M&J Europe is tasked with developing new production lines that deliver productivity, efficiency, quality and above all compliance to the most stringent of regulations.

As part of its ongoing investment strategy, the Tredegar Gwent company purchased a waterjet

cutting machine just over three years ago to process everything from metals to plastic, perspex, glass and other materials that may require trimming. However, with the company processing an increasing level of brackets, excavators and machine guards made of mild and stainless steel, it soon became apparent that waterjet cutting was a bottleneck in the business. To temporarily alleviate the bottleneck on a machine running 24/7, the Tredegar Gwent company transferred some of the work to its manual and high-spec CNC machining department. Serving as only a temporary solution, the M&J Europe team visited MACH 2024 for a laser-cutting machine.

As M&J Europe's managing director, Chris Garland, recalls: "The waterjet machine was effective, but we needed something much faster. We took a team to MACH to buy a laser welder and look at three or four laser-cutting options. We found the Kerf Developments stand, met the Kerf and Lincoln Electric team and noticed the Lincoln Electric Linc-Cut 1530A 6kW fibre laser. We have witnessed sub-standard service and support from some of our machine tool suppliers, so technical support and maximum machine uptime were critical to us. Our team was familiar with the Lincoln Electric brand through our welding technology, so we wanted to explore this avenue. We did our due diligence and looked at other brands, but the conversations with Kerf regarding support sealed the deal for us."

Following a visit to Lincoln Electric in France to investigate the machine further, an order was placed for a Lincoln Electric Linc-Cut 1530A 6kW machine that was installed and commissioned in January 2025. With a short training period and confidence in the support and service from Kerf, the machine has been running relentlessly since installation.

The philosophy

M&J Europe has a philosophy that it manufactures everything it requires in-house with no dependence on a subcontract supply chain. M&J Europe Founder Mike Garland says: "We offer everything from project and facilities management to onsite support as well as the production of conveyor belts, production lines and bespoke machinery. If one of our customers incurs downtime on a production line, the lost production costs can be well over £200,000 per





The LINC-CUT Fiber 1530A at M&J Europe

machine has a cutting speed of around 800 mm/min. Depending upon the material and thickness, the Lincoln Electric Linc-Cut 1530A 6kW machine can cut at speeds beyond 25m/min. The savings have been incredible in

the short time we've had the machine. We made a series of brackets from a 3 m by 1.5 m sheet in 8 hours on the waterjet machine, which has been reduced to 25 minutes on the laser. Excavator buckets are another common task that would take a full week to produce 100 buckets on the waterjet running 24/7, on the new laser we can produce over 225 buckets from 15 steel sheets in a day. We also manufacture a couple of hundred conveyors for customers every month; a batch of these would take 8 hours to cut on a guillotine, drill and hand-finish on the laser, we can do this repeat job in just 20 minutes."

The manual processing of components highlights another saving generated by the new laser, labour costs. With new production lines

and projects continually passing through the business, M&J Europe also has to balance its scheduled work with urgent repairs, scheduled maintenance, servicing and replacement of parts for end users. Across the business, this can absorb up to 120 hours of manual machining, cutting and processing components in a month. Much of this labour input has been eradicated with the arrival of the new laser machine.

Looking to the future, Chris Garland concludes: "The quality, consistency and finish of our sheet metal parts has improved considerably with the Linc-Cut 1530A, and we are delighted with both the productivity and cost savings as well as the service we receive from Kerf. We install production lines where the quality of our engineers and our level of service is paramount. When Kerf installed and commissioned the Lincoln Electric Linc-Cut 1530A, we recognised the professionalism of their team. When the requirement arises, we'll certainly buy more machines from Kerf and Lincoln Electric."

Kerf Developments Ltd

Tel: 01706 757 670

Email: sales@kerfdevelopments.com

www.kerfdevelopments.com

hour so it is imperative that we can react and resolve breakdowns at speed. Relying on a subcontract supply chain is not an option. We frequently have to charter helicopters to get our engineers to customer sites around the UK, as reaction speed is critical. Upstream, the reliability of our machine tools and production speed is also critical, that is why we put our well-placed trust in Kerf and Lincoln Electric."

The savings

While minutes on the production floor may not be critical in developing a new project, they are of the utmost importance when manufacturing replacement parts, servicing breakdowns, or undertaking scheduled maintenance.

Chris Garland continues: "Our waterjet



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New fibre laser machines from Nukon make high-performance cutting even more accessible

Already renowned for its high quality European-built fibre laser machines and press brakes, Nukon Lasers UK has launched a new, massively re-engineered range of laser machines to make high-performance metal cutting even more accessible.

The new machines, branded the Nukon Cross Series, have been designed with a strong focus on productivity. They offer powerful 2D flat sheet metal cutting capability and can be specified with bed sizes of 3 m x 1.5 m, 4 m x 2 m, or 6 m x 2 m. Power options range from as little as 2 kW, right up to 30 kW for the most challenging of laser-cutting applications.

To enable Cross Series customers to tailor their new fibre laser machine to their specific needs, Nukon also offers a number of high-spec optional features. Depending on model, buyers can choose from state-of-the-art American-made nLIGHT fibre lasers, or from the Raycus range of extremely robust fibre lasers. In fact, thanks to Nukon's use of Raycus power sources, prospective buyers will find that the cost of reliable, high-performance laser cutting of mild and stainless steel has fallen considerably.

Advanced Lantek Expert CAD/CAM nesting software can also be specified with each Nukon Cross machine, as can CutLine programmable beam-shaping technology, for nLIGHT models. Additionally, Nukon's innovative Plus Cut technology is offered on machines with resonators above 12 kW. Developed for the precise cutting of thicker materials, Plus Cut



delivers fast, stable clean cuts on mild steel of 20 mm thickness and above. Other options include automatic nozzle cleaning, cut detection, piercing sensing and automatic nozzle changing, all technologies to help ensure businesses are competitive in today's commercial environment. Cross Series machines have also been designed to integrate with the full range of Nukon automation systems, for huge productivity benefits with minimal manning levels.

The accessible, high-quality European-built alternative

"Our new Cross Series makes high-quality, highly reliable European-built Nukon fibre laser cutting machines accessible to even more UK manufacturers and subcontractors, all with uncompromising levels of after-sales support from the Nukon Lasers UK team," says Nukon Lasers UK's sales director, Steve Haddrell. "Cross machines share the DNA of the incredibly

popular Nukon NF Pro model they replace. Its natural successor, they offer blistering performance and a robust, efficient design, at a highly accessible price point.

"Nukon takes pride in building exceptional quality 2D, 3D and tube fibre laser machines at prices which compare extremely favourably to other European brands," continues Steve Haddrell. "Through the new Cross Series, Nukon is providing a high-quality alternative for organisations that may otherwise consider looking further afield for an affordable laser-cutting machine.

Cross Series machines may be more price-accessible than other models in the Nukon range, but they are built to the same exacting standards and will easily exceed the requirements of many subcontractors and in-house manufacturing centres. Depending on workflow, in reduced outsourcing costs alone, a Nukon Cross Series machine should typically pay for itself over a couple of years, but will work reliably in your business for many, many more."

The sister company of UK-based tube bending machinery specialists, Unison Ltd, Nukon Lasers UK is the exclusive UK and Ireland distributor for Nukon's European-built 2D, 3D and tube fibre laser cutting machines, press brakes and loading & unloading solutions. Nukon fibre lasers combine high speed and high precision with exceptional value and build quality, as well as exceptionally low running costs. The Nukon Lasers UK team offers first-class machine tool service, training, maintenance and technical support, in addition to service contracts and service level agreements that can be tailored to specific requirements.

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Flexibility and efficiency with Bystronic



The ByTube Star 330 from Bystronic is the most versatile tube laser on the market, with a loading length for tubes of up to 12.8 metres, a laser power of 6 or 10 kW and the capability to automatically process tubes and open sections within the entire range, from 19 to 305 mm, without setup time.

The modular, large 3D fibre laser tube cutting machine ByTube Star 330 is the only one of its kind to automatically process tubes and open sections within the diameter range of 19 to 305

mm without setup time. With minimal manual setup, even processing up to 324 mm is possible.

With the ByTube Star 330, customers will experience a new level of efficiency: The tube laser offers a very high processing speed on the market for parts over 250 mm and 40 kg/m. Fully automatic feeding and sorting increases productivity and lowers the cost of labour significantly.

The laser source, available in a power choice of 6 kws or 10 kws, ensures sufficient power to cut even particularly large and thick tubes or profiles quickly and with the highest quality.

The ByTube Star 330 is the all-rounder that any production needs. It cuts all standard profiles, open profiles in boxes from 19.05 mm x 19.05 mm to 260 mm x 260 mm and open profiles C + L + H + I and supports a broad range of diameters and different cutting processes.

The strengths of the ByTube Star 330

Versatility: The modular approach, with three different loading options that can be configured freely to accommodate a great number of possibilities, results in a custom-made solution

for any floor space. Upgrades can be installed at any time.

Automation: The integration of processes such as drilling, tapping, marking, and phase cutting without manual intervention saves on time and cost.

Powerful: With a laser power of 6 or 10 kW, the ByTube Star 330 masters even special requests, such as cutting thick tubes with bevel cuts, without compromising cutting quality.

Expandability: Options such as Laserscan, Weld Search Camera, and Quick Cut guarantee the highest quality and safety in every work process.

Precision: The 3D cutting head and the Quick Cut option ensure the highest speed and quality, even with very small tubes.

User-friendliness: Due to the intuitive touch screen and tried-and-tested Bystronic HMI, operating the ByTube Star 330 is as easy as using a smartphone.

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Prima Power has unveiled Giga Laser Next

Revolutionary leap in 3D laser cutting designed for the high-output demands of the automotive industry

Prima Power has unveiled Giga Laser Next, a game-changing breakthrough in 3D laser cutting, tailored to the growing challenges of high-volume automotive manufacturing:

Four heads, one giant leap: World-first configuration allowing four laser heads in a cartesian machine to work simultaneously on a single part, delivering unprecedented spacetime efficiency.

Made for the Giga era: Tailored for giga-factories and the rising use of giga presses, Giga Laser Next meets the evolving demands of automotive manufacturing.

Ready for the line: Fully integrable with lean automation, built for seamless, unmanned production lines.



At the heart of Giga Laser Next is a unique configuration of four synchronized laser heads working simultaneously on the same part.

A new machine for a new paradigm

With four synchronised laser heads cutting the same part and a dual-station layout that enables parallel loading and unloading, Giga Laser Next multiplies productivity while shrinking occupied space, unlocking new benchmarks in spacetime efficiency. Designed for giga-factories and the high-output production of High-Strength Steel (HSS) automotive components, Giga Laser Next is a response to the most urgent demands in the industry.

Why go Giga now?

Since the 1990s, High-Strength Steel (HSS) has revolutionised vehicle manufacturing by

offering unmatched strength-to-weight ratios, enabling safer, lighter and more sustainable vehicles. However, the very strength of HSS makes it unsuitable for conventional processes, creating a natural synergy with 3D laser cutting.

As automotive OEMs scale up to meet giga-factory throughput and EV demand, previous generation laser systems, while still effective in less intensive applications, struggle to keep up with the most demanding productivity requirements. Giga Laser Next is a Prima Power proprietary solution engineered to



Giga Laser Next with optical and mechanical quality check station enclosures.

address directly the industry's most pressing needs, maximising both floor space utilisation and machine uptime for optimal production efficiency, minimising direct labour, managing market volatility and multiple vehicle models and ensuring short lead times.

The Prima Power legacy of leadership

From the trailblazing Optimo and Rapido to the renowned, ultra-fast Laser Next, Prima Power has continuously led innovation in 3D laser systems for the automotive industry. With nearly 50 years of experience and a global installation base, Prima Power has shaped the standard and is now redefining it.

Giovanni Negri, CEO of Prima Power and Prima Industrie Group, comments: "A new chapter in 3D laser processing begins. Giga Laser Next embodies the essence of our strategy: Evolve by integration. We've integrated the productivity of four machines into a single compact unit, achieving what was previously thought impossible. This is not just a technological achievement, it's a result of listening to our customers and translating their giga-scale ambitions into a tangible solution. I



Giga Laser Next features maximum productivity and minimum floor space for automated 3D laser cutting.

want to thank the Prima Power team for their dedication and incredible innovation capacity, as well as our partners and customers whose insights have been invaluable in shaping and optimising this game-changing solution to meet their real production challenges.”

What makes Giga Laser Next a game changer

Giga Laser Next stands out for three powerful reasons that directly address the demands of high-volume automotive production, typically >200,000 parts/year, while maintaining the flexibility to handle multiple part codes:

- +280 percent higher productivity per m².
- -75 percent average cutting stations required and production changeover time.
- One piece flow, fully unmanned automation, complete integration into the production line.

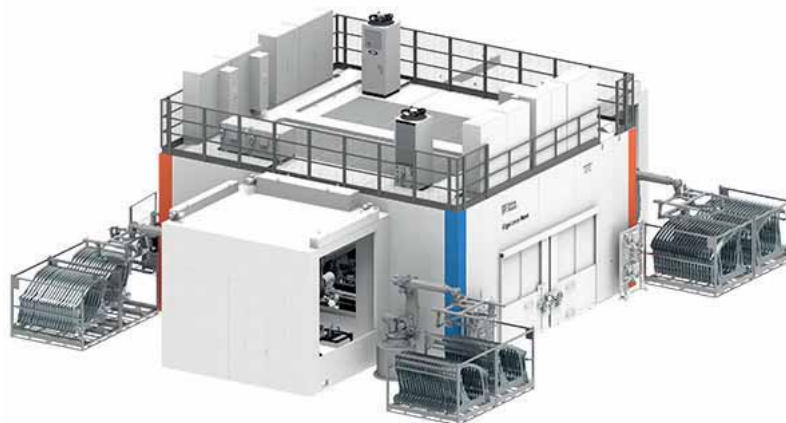
These benefits are made possible by a series of groundbreaking technical innovations. At the heart of Giga Laser Next is a unique configuration of four synchronised laser heads working simultaneously on the same part, enabled by advanced anti-collision system and a robust cartesian structure with high-performance retractable arms. The machine operates with typical idle time of around two

seconds, thanks to parallel loading/unloading on one station, while the process is performed on the other. Its compact 10 × 10 m footprint is achieved by integrating ancillaries like laser sources and chillers on a mezzanine level, maximising floor space efficiency.

Designed for full automation, Giga Laser Next supports embedded solutions for loading, unloading, quality checks and marking, with the flexibility to connect directly to stamping or assembly lines. It also features an easy fixture

change system, digital twin validation and a machine architecture optimised for long-term reliability and minimal maintenance, making it ideal for high-volume production of automotive stamped and cast parts.

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Giga Laser Next with input and output racks on opposite sides.

AMADA launches the new ORSUS-3015AJe

ORSUS-3015AJe is AMADA's solution for companies looking to build a solid foundation for their first step into the world of high-speed, high-precision laser cutting. With available power options ranging from 3 to 8 kW and a wide range of advanced technologies and features, it is the ideal starting point for any business and can adapt to a variety of production environments. The ORSUS-3015AJe comes fully equipped with numerous features designed to enhance cutting quality, reliability, and ease of use: the Automatic Mode Converter, the Laser Integration System (LIS), the latest-generation AMNC 4ie control, compatibility with V-factory and IoT, Mobile HMI and more.

The Automatic Mode Converter seamlessly switches the laser beam from a highly focused beam, used for piercing and cutting thin materials, to a wider and more stable beam for thick sheet processing. This transition is instantaneous and automatically managed by the laser, allowing it to switch between piercing and cutting modes, fully leveraging both beam types for any material. In addition, a single focusing lens can be used for the entire material range.

ORSUS-3015AJe includes a suite of LIS system

features from AMADA, such as an automatic head collision detection system and the i-Optics sensor to monitor protective glass wear. Also included is i-Process Monitoring, which detects errors during cutting or piercing and attempts to correct them without halting production. Flexibility is key, ORSUS-3015AJe is compatible with most AMADA automation solutions, both factory-installed and retrofittable. This means it can be configured to meet the production needs of a wide variety of industrial sectors and can easily adapt to changes over time.

The latest-generation AMNC 4ie numerical control is designed to be intuitive and fast. The new “maintenance guide” mode supports less experienced operators in daily tasks, while the updated machine history tool shows data on efficiency and energy consumption. Another feature is the i-Camera Assisted System (i-CAS), where the internal camera takes a snapshot of the sheet on the cutting bed and automatically



nest parts in the available space or allows the operator to move, rotate and place them using the touchscreen. The AMNC 4ie is also compatible with AMADA's Mobile HMI, allowing remote monitoring of the machine through internal cameras and the alarm system, as well as remote programming and scheduling. The operator only needs to load the material and press “start.”

Remote assistance is also available, thanks to full compatibility with AMADA's V-factory and IoT systems.

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Next-generation manual MIG/MAG welding

The Fortis product range from Fronius contains powerful devices in the 270 to 500 A categories, either as compact all-in-one systems or as split versions with an external wirefeeder for a significantly extended operating range. All models can be equipped with proven Fronius functions such as pulse welding, SynchroPulse, stitch welding, TAC tacking function, HotStart and anti-stick.

The portfolio is complemented by the Fortis XT, an extremely energy-efficient all-rounder for three-phase mains voltages from 200 to 600 V and single-phase operation up to max. 320 A including CEL mode. As a result, these machines are perfect for worldwide use, save energy thanks to their higher power factor and offer an additional higher output characteristic curve for even greater welding performance.

Rounding off the range is the Fortis Duo. It combines a compact device with an additional, external wirefeeder to enable the use of two wire spools and two welding torches with just one single machine. "This means that the welder can easily switch between different materials or wire diameters at the touch of a button and all without any retooling," explains Michael Eisterhuber, product line manager at Fronius International. "Users save an enormous amount of time through this feature, which is ideal for frequently changing tasks in contract manufacturing, steel construction, or assembly."

Developed for a flexible work day

In many companies, welding tasks change on a daily basis, with new materials, changing seam shapes, or different components. The Fronius Fortis was developed as a solution to aid in this dynamic. With up to 240 welding characteristics that have been specially optimised for steel, stainless steel and aluminum, Fortis guarantees reliable results even in demanding applications



such as vertical-up seams, root passes, or thin sheet metal joints.

Multiprocess

MIG/MAG, TIG, or MMA? It doesn't matter as Fortis variants are available up to a power category of 500 A with the Multiprocess function and can handle all common welding processes to deliver the highest quality results. "With Multiprocess, Fortis is not only versatile but also fit for the future. This means that it is equipped for all possible future tasks that may not even be known today," says Peter Fronius. "It is therefore the ideal and extremely flexible solution for companies with a wide range of applications."

Intuitive operation including welding parameter wizard

"A central element of the Fortis series is our completely new operating concept," says Michael Eisterhuber. "The clear 7" colour display with dynamic visualisations, self-explanatory graphics and a multilingual menu with over 30 languages to choose from make operation particularly easy, even for less experienced users." Three robust rotary and push buttons allow precise adjustments and parameter selection, even when wearing welding gloves. All important working and welding parameters are

also visible on the first menu level. Important settings can be saved and the newly integrated welding parameter wizard guides the welder to the ideal setting in just a few steps, leading to fewer errors, less downtime and greater efficiency and quality in production.

Maximum connectivity, ready for digital manufacturing

Thanks to Wi-Fi and Bluetooth as standard features, the Fortis can be fully integrated into the Fronius software landscape. The devices are compatible with WeldCube Air, WeldCube Premium, WeldCube Navigator and Central User Management for user administration, seamless welding data documentation, fleet management and process reliability. The innovative Vizor Connect welding helmet can also be connected wirelessly and ensures maximum comfort and protection. NFC readers, wireless remote controls and extensive documentation functions are available as optional extras.

Focus on sustainability and longevity

The new housing concept for the Fortis series relies on a high proportion of recyclable aluminum and reduces the use of plastic. The devices are particularly easy to maintain, durable, designed for tough use in harsh conditions and extensively tested, protected by the perfect casing for the sophisticated technology inside. Fortis XT also impresses with energy savings of up to 16 percent, making it not only extremely powerful, but resource-efficient too.

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As flexible as your work

Welding tasks are often a challenge, especially for small and medium-sized companies. Every job brings new requirements and different materials. Some of the tasks change on a daily basis, as do the required welding processes. This calls for a welding machine that can be adapted perfectly to these dynamic conditions.

The Fortis series rises to this challenge with up to 240 optimised welding characteristics, specifically engineered to meet the rigorous demands of steel construction. It delivers consistently reliable performance, making it a standout solution for professionals who value precision, efficiency, and adaptability.

In addition to steel, this MIG/MAG welding machine also masters materials such as aluminium and stainless steel effortlessly, especially in combination with the pulsed arc.

More at: www.fronius.co.uk/fortis



CLOOS presents innovative 3-wire process

Evolution for MIG/MAG welding

With the new TANDEM+ MIG/MAG welding process, CLOOS sets new standards in terms of efficiency, performance and flexibility. The innovative technology is based on a revolutionary 3-wire system and offers up to 30 percent higher deposition rates compared to the previous Tandem Weld technology.

Revolutionary 3-wire process

TANDEM+ was specially developed for applications with high demands on deposition rate and process reliability. This high-capacity process combines two independent arcs with a filler wire in a molten pool. The innovative 3-wire process guarantees maximum process stability and optimum results, even for complex welding tasks. The result: Less welding layers and intermediate layer cleaning, shorter welding times and significantly reduced rework effort overall.

TANDEM+ is particularly suitable for large-volume welding in sectors such as rail vehicle construction, wind power, steel and boiler construction and the construction machinery industry, wherever thick-walled components have to be welded in multiple layers.

Simple upgrade for existing systems

Another advantage: Existing welding systems

with tandem technology can be easily converted to TANDEM+ with an upgrade kit for a quick and economical entry into the next generation of MIG/MAG welding.

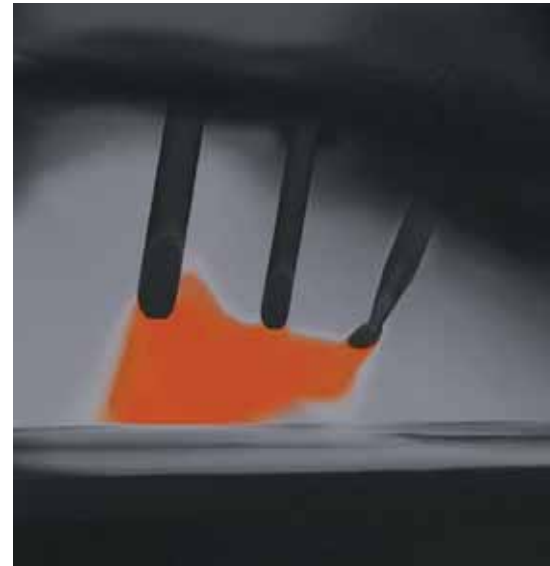
World premiere at the SCHWEISSEN & SCHNEIDEN 2025

TANDEM+ celebrated its official premiere at the international trade fair SCHWEISSEN & SCHNEIDEN. In a live demonstration within a fully automated robot cell, visitors experienced first-hand how the innovative 3-wire process works in practice. TANDEM+ raises the deposition rate to a completely new level with a reduced number of welding layers and shorter welding times.

TANDEM+ at a glance:

- Up to 30 percent higher deposition rate.
- Revolutionary 3-wire process for maximum flexibility.
- Less welding layers, shorter welding times.
- Reduced cleaning and programming effort.
- Simple retrofit of existing systems.

The CLOOS Group is an international company with its headquarters in Haiger. With over 1,000 employees worldwide, CLOOS supplies welding know-how for industrial applications with the highest demands on durability and quality in efficiency-driven industries. As a global product



The unique 3-wire system ensures maximum efficiency and flexibility in use.



TANDEM+ offers up to 30 percent higher deposition rate compared to previous tandem technology.



TANDEM+ combines two independent arcs with a filler wire in a molten pool.

and solution brand, CLOOS combines specialised knowledge from welding applications, robotics, automation and software in customised solutions for medium-sized companies as well as for large international automotive, commercial vehicle and agricultural machinery manufacturers. In doing so, CLOOS not only provides the decisive technical production advantage in order to produce competitively in the long term, but also faces the challenges of tomorrow as a problem solver together with its customers today. With 10 production sites and more than 60 sales and service centres, including North and South America, Asia and Australia, customers worldwide rely on solutions from CLOOS.

CLOOS UK

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State-of-the-art welding technologies for E-mobility

KUKA receives follow-up order from major automotive manufacturer

KUKA is supporting the transition to a more sustainable mobility with state-of-the-art technology. Following a major order last year for 23 friction welding cells with integrated robots for the electric vehicle production of a major automotive manufacturer in the US, KUKA has now received a follow-up order for 12 additional cells for a production expansion.

The delivered cells were installed and commissioned in stages by August 2025. The FSW cells (FSW stands for friction stir welding) with KUKA KR FORTEC robots and clamping devices tailored to the welding process were integrated into production lines for electric vehicles, where they will be used in several manufacturing steps.

The robots in the cells weld battery cases together and, in a second production stage, connect cooling water jackets to the battery cases. KUKA is also responsible for the entire friction stir welding process, including assembly, commissioning, training and final acceptance at the customer's site.

Flexible production on a new level

KUKA technologies are being used in the comprehensively retooled production plant. The new, flexible plant makes it possible to build vehicles with combustion engines, hybrids and electric vehicles on the same production lines. The technological challenge is to join the battery trays, which consist of two cast half-shells, using 3D welding. This is best realised with FSW robots from KUKA.

With the conversion, the production was redesigned to create a working environment that is more employee-friendly and environmentally sustainable, while offering maximum quality, efficiency and value for customers.

FSW: Higher quality, more efficient and more sustainable welding

In friction stir welding or FSW welding, a rotating, pin-like tool is guided along the contact surfaces of the component. The friction heat plasticises the material and the parts are joined together. This allows even difficult-to-weld or dissimilar materials such as aluminum to be welded to magnesium, copper, or steel. This process consumes less energy and material.

FSW welding is used in a wide range of industries that have special requirements for weld seams, such as battery cases, side walls of



high-speed trains, or tank structures for rockets. In addition to the growing E-mobility market, the technology is therefore also used in the aviation and electrical industries, for example. KUKA expands its FSW robot portfolio

Robots used for friction stir welding must meet special requirements, as this complex manufacturing process involves particularly high process forces. KUKA offers a special machine tooling (MT) variant in its KR FORTEC product family for this purpose. With their more powerful motor and pre-gears for even greater rigidity, these variants are ideal for the FSW process. The KUKA portfolio is growing and the company is setting new standards with two new MT variants from the KR FORTEC ultra robot family.

With its double swing arm in combination with adapted robot parameters, the KR FORTEC ultra ensures maximum path accuracy with 20 percent higher process force. The new models also have a reach of up to 3,400 mm, which increases the effective working range for KUKA customers in friction stir welding.

The new FSW robots will be gradually integrated into KUKA's FSW solution portfolio. This includes the new FSW application module, the modularly scalable production cells of the cell4_FSW type and turnkey solutions tailored to customer requirements.

KUKA Group

The KUKA Group is an international automation group with sales of around EUR 3.7 billion and



around 15,000 employees. As one of the world's leading suppliers of intelligent, resource-efficient automation solutions, KUKA offers industrial robots, Autonomous Mobile Robots (AMR) including controllers, software and cloud-based digital services, as well as fully connected production systems for various industries and markets such as automotive with a focus on E-mobility and battery, electronics, metal and plastic, consumer goods, food, e-commerce, retail and healthcare. The KUKA Group is active in more than 50 countries with over 100 locations. The largest sites are in Germany, USA, China and Hungary, with headquarters in Augsburg.

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How Kemppi helps its partners succeed in cobot welding

The cobot welding industry is rapidly evolving, driven by increasing automation demands, labour shortages and the need for more flexible production processes. European manufacturers, particularly SMEs, embrace collaborative robots, cobots, to enhance welding efficiency, precision and safety.

Alessio Cocchi from ABB says: "The demand for automation solutions is rising, particularly to address labour shortages and improve productivity. Cobots make welding operations more flexible for high mix, small volumes, helping processes become more efficient, precise and safer."

Moreover, the push for sustainable manufacturing has accelerated the adoption of energy-efficient welding technologies. ABB's GoFa cobot, for instance, operates on low energy consumption, making it a sustainable choice for companies looking to reduce their carbon footprint. Jakub Bancer from FANUC adds: "FANUC continues to expand its cobot range to meet industry-specific certifications and safety requirements, ensuring flexibility and reliability."

Additionally, the European steel industry is shifting towards low-carbon production methods to meet stringent environmental regulations. Companies are investing in green technologies to reduce emissions and cobot welding solutions play a crucial role in this transition by improving energy efficiency and reducing waste.

Alessio Cocchi notes: "Our GoFa cobots are designed to consume minimal energy while maintaining high efficiency, aligning with the industry's sustainability goals."

What manufacturers should look for in cobot welding solutions?

When selecting a cobot welding solution, there are a few main factors to consider:

Ease of programming: Simple, user-friendly interfaces allow welding professionals to quickly set up and program cobots without extensive robotics expertise and adapt the programs quickly to new products.

Flexibility: The ability to adapt to different production volumes is important for companies with a mix of high- and low-volume production.

Safety and compliance: Meeting CE safety standards and ensuring safety in all welding operations.

High-quality welds: Ensuring consistent and repeatable welding quality to reduce defects and rework.

Seamless integration: Compatibility with existing production lines and



automation systems and easy-to-integrate solutions with plug-and-play components.

Sustainability: Energy-efficient welding solutions that align with environmental regulations and carbon reduction initiatives.

Both ABB and FANUC emphasise that cobots should be easily integrated into production environments. ABB GoFa cobots stand out for their enhanced reach and accuracy, while the wide range of FANUC cobots offers intuitive hand-guided programming, making them accessible to operators without advanced robotic experience.

Why invest in Kemppi's cobot welding solution?

Kemppi's cobot welding solutions are designed to meet the needs of customers, offering:

A ready-to-weld package: Kemppi's cobot welding package provides a plug-and-play solution that includes a welding power source, hose kit, and the GXe-C cobot torch, making integration seamless.

Fast and easy setup: ABB and FANUC integrators praise the ease of setup and programming, which allows quick adaptation to new workpieces.

Compact design: The small footprint makes it ideal for SMEs looking to automate welding in limited production spaces.

High-quality welds: Stable and repeatable welding quality ensures reduced scrap and rework.



Strong technical support: Kemppi's responsive support team fosters trust and smooth cooperation with integrators.

Energy efficiency: Kemppi solutions contribute to lower energy consumption, supporting sustainable manufacturing practices.

Collaboration between Kemppi and its partners

The partnership between Kemppi and major cobot manufacturers like ABB, FANUC, Yaskawa and Universal Robots plays a critical role in advancing cobot welding. Integrators appreciate close cooperation, especially in adapting hardware and software to meet market needs.

Alessio Cocchi from ABB states: "Kemppi's fast adaptation of its solutions, such as attachments for manual welding torches and remote panels, has been invaluable."

FANUC values Kemppi's transparent welding system and ease of implementation. Jakub Bancer says: "We are looking forward to further cooperation with Kemppi to raise awareness about automation benefits and introduce more manufacturers to cobot welding."

ABB and FANUC anticipate continued growth in cobot welding adoption, particularly in the SME sector, where automation is still in its early stages. As new cobot models with enhanced capabilities enter the market, the demand for high-quality, easy-to-integrate welding solutions will rise.

Both cobot manufacturers expect ongoing collaboration with Kemppi to promote cobot welding solutions and educate customers on the benefits of automation.

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