

METALWORKING NEWS

VOLUME 25.1

March 2026

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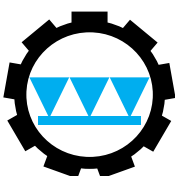
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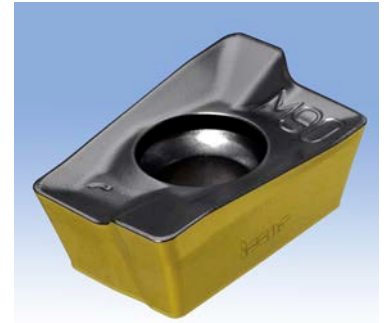
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I'd hate to be an actuary



Recent tension between Iran, the United States and Israel has again placed global industry on alert. While direct military engagement remains relatively contained across the Middle East, the metalworking industry is exposed to secondary effects that move quickly through energy and logistics markets.

An area of concern is the Strait of Hormuz. At the time of writing, AIS shipping data showed a build-up of stationary oil and gas tankers on either side of the Strait. Roughly a fifth of the world's traded oil and gas passes through this corridor. Any disruption, whether through naval activity or other military threats feeds directly into crude prices.

Fabricators, foundries and machine shops operate in energy-intensive environments. Furnace operations, heat treatment, rolling mills and casting plants are sensitive to both electricity and oil tariffs. A sustained increase in oil prices would filter through to diesel and freight costs for some regions that rely on the Gulf as their source, lifting input costs across the board. It's anyone's guess how long this conflict will last, but the longer it does, the longer the inflationary consequences will last too.

This could be a major blow to economies that have only just begun to show signs of recovery post a sustained period of contraction.

Airspace closures across parts of the Middle East add a second layer of pressure. High-value tooling, electronic controls and cutting inserts for example are often shipped by air. Rerouting aircraft around conflict zones or away from transit hubs like Dubai extend transit times and raise freight rates.

Delays in the delivery of CNC components or servo drives can stall installations and shop floor upgrades. For manufacturers working on lean inventories, extended lead times introduce risk into production schedules. Maritime insurers also simply cancel war risk cover as they have done in the Gulf. Quickly the cost of shipping a container also rises.

Shipping lanes in the Gulf region also handle steel, aluminium and petrochemical feedstocks. Any slowdown in vessel movement has major knock-on effects. The experience of recent global disruptions has shown how quickly mills adjust export allocations when freight becomes uncertain.

Inflationary effects would not be limited to raw materials. Banks may tighten credit exposure to counterparties in the region. These costs work their way into project pricing, affecting capital equipment orders and maintenance budgets.

For the metalworking industry, the issue is less about direct exposure to the conflict and more about volatility. Energy, logistics and finance form the base of every production line. Instability in any one of these areas places pressure on margins. Procurement strategy and inventory management become as critical as spindle speed or cutting data.

Outside of our industry, other inflationary consequences also happen as a result of the reduced movement of freight. Take food security as an example. The UAE has some of the most highly sophisticated cold chain supply environments in the world. Not only does cargo move through the region, but so does some of the world's most prized fresh and frozen food stuffs.

Take for example the Seychelles or Mauritius – both nations rely heavily on imported food that transits through the UAE. Both nations also rely heavily on tourism. No food means hotels can't feed their guests. You don't just simply jump on the phone and rearrange your supply chain overnight.

So where to next? We'll just have to wait and see – and absorb the inflationary results that will inevitably come with this latest conflict.

Some reports indicate that the US currently only has a few weeks of firepower at its disposal in the region – so at what point does the cost of using expensive military aircraft and missile interceptors to down cheap drones come into play?

One thing is for sure, the average consumer is likely to see recent gains in purchasing power eroded.

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Future proofing job shops to mitigate skills gap



The ill-effects of a lack of available labour are being felt across job shops, translating to decreased production efficiency, quality control challenges and higher operational costs. For example, a shortage of skilled machinists may result in longer setup times for machines, more frequent errors and increased downtime. This delays the completion of jobs, causing missed deadlines and unhappy clients.

Alternatively, a lack of certified welders could lead to improper welds that fail quality inspections. This not only increases the cost of materials due to rework but also delays shipments. Perhaps the absence of experienced fabricators requires a shop to hire temporary workers who lack the same level of skill, resulting in more defective products. This increases the cost of production and reduces profit margins.

As manufacturers seek both short- and long-term help in managing the labour shortage and mitigating its consequences, technology emerges as a critical tool. By leveraging cloud software, such as enterprise resource planning (ERP), manufacturers can help with job scheduling and maximising resources. For example, machine-monitoring systems integrate and analyse shop floor and ERP data in real time, enhancing the productivity of existing labour. Instead of manually calculating factors like machine availability, skill requirements and delivery deadlines for scheduling, cloud-based ERP automates this process.

Cloud-based ERP's can streamline production planning and automate routine tasks, reducing the reliance on time-

intensive manual intervention and minimising bottlenecks. In a machine shop, jobs are scheduled by machine availability and skill requirements, leading to efficient utilisation even with limited skilled machinists.

ERP's offer integrated tools that standardise processes and provide real-time tracking of production quality. Those checks and balances mean less errors, more automated alerts for deviations and consistent outputs. At the core of job shops' needs is reducing operational costs, and by providing accurate data on resource utilisation and labour costs, cloud-based ERP's help reduce unnecessary expenses. Leveraging the right technology can help analyse labour costs in real time, identifying cost-saving opportunities such as better shift management or reallocation of tasks to reduce reliance on expensive temporary workers.

As manufacturers seek immediate relief, leveraging an ERP can be a core way to help lessen the pain points driven by the ongoing labour and skills shortages.

Beyond short-term benefit, leveraging cloud ERP solutions can help towards long-term, sustainable growth practices as well. Employing cloud solutions can significantly enhance a job shop's appeal to younger generations by aligning with their preference for digital, efficient, and tech-driven work environments. Additionally, cloud ERP's can offer remote accessibility, which is increasingly attractive to younger workers who value flexibility. This not only improves job satisfaction and retention but also positions the company ▶

as a forward-thinking employer, making it more attractive to tech-savvy talent.

At their core, ERP's work to streamline operations, making employees' roles less tedious and more engaging. According to McKinsey data, Gen Z wants to make a difference; they're the only generational cohort that considers "meaning" as a top two reason to take, keep or quit a job. Automating mundane tasks and enabling employees to focus on higher-value activities drives that meaning.

Education is the second critical pillar influencing long-term talent attraction. Manufacturers must work to demonstrate clear career advancement opportunities within the industry. By actively promoting stories of employees who have progressed from entry-level roles to higher-paying, specialised positions, job shops can show that true potential.



In leveraging cloud-ERP solutions, job shops can receive immediate reprieve from ongoing challenges, while setting themselves up with the infrastructure required for long-term solutions. Investing in back-end technology prepares job shops to scale with security, and weather the storm of inevitable market disruption. ■

This is the viewpoint of Darren Toy, Product Director, ECI Software Solutions and it first appeared in Manufacturing Engineering

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cover story

Iscar's advanced tooling solutions for high-mix, high-precision manufacturing



Fig. 1 SUMOTEC PVD coated grades are designed for applications requiring sharp cutting edges and low cutting forces

High-mix, high-precision manufacturing environments impose stringent requirements on metal cutting operations, including elevated productivity, reduced machining cycle times, and repeatable dimensional accuracy across a broad spectrum of materials. Iscar has developed a comprehensive portfolio of advanced metalworking solutions that address these challenges through innovations in carbide substrate metallurgy, multi-layer coating architectures, modular tooling systems, application specific cutting geometries, and digital machining support.

The performance of cutting tools in high speed and high load machining is governed by the complex thermo mechanical interactions occurring at the chip-tool interface. These interactions generate

extreme contact pressures, localised temperatures exceeding 800 – 1 000 °C, and severe abrasive, adhesive, and diffusion wear mechanisms.

Iscar's SUMOTEC technology addresses these challenges through the combined optimisation of micro grain carbide substrates and multi-layer Physical Vapour Deposition (PVD) and Chemical Vapour Deposition (CVD) coatings.

SUMOTEC PVD coated grades (Fig. 1) are designed for applications requiring sharp cutting edges and low cutting forces. TiAlN and AlTiN based nano layer coatings provide high hot hardness and oxidation resistance while maintaining low friction at the chip-tool interface. This minimises built up edge formation and notch wear when machining austenitic stainless steels, nickel-based superalloys, and titanium alloys. The reduced thermal conductivity of the coating system limits heat transfer into the carbide substrate, thereby improving resistance to edge chipping and micro fracture under interrupted cutting conditions.

In contrast, SUMOTEC CVD coated grades employ thick, multi-layer structures incorporating TiCN and Al₂O₃ layers. The Al₂O₃ layer acts as a thermal barrier, significantly reducing diffusion wear and plastic deformation at elevated cutting speeds. These coatings are particularly effective in continuous and interrupted turning of ISO P and K materials, where crater wear and thermal softening dominate tool failure. The controlled coating adhesion and residual stress management ensure stable edge performance and predictable tool life in high volume production environments.

High-mix manufacturing requires tooling systems capable of rapid reconfiguration without compromising rigidity or positional accuracy. Iscar's LOGIQUICK modular tooling platform addresses this requirement through standardised mechanical interfaces that enable interchangeable cutting heads, extensions, and adaptors across multiple machining operations.

LOGIQUICK solutions, including LOGIQ 3 CHAM drills and modular turning toolholders, are engineered to provide micron level repeatability during tool changes. The precision ground coupling interfaces ensure high torsional stiffness and bending resistance, even in applications with extended



Fig. 2 Iscar's LOGIQ-3-QUICK drilling system addresses these challenges through a hybrid design that combines a rigid carbide drill body with exchangeable solid carbide drilling heads

tool overhangs. This mechanical integrity minimises dynamic deflection and vibration, which are critical factors influencing surface finish and dimensional accuracy.

From a production standpoint, LOGIQUICK tooling reduces setup and changeover times by eliminating the need for tool requalification and offset recalibration. The modular architecture also reduces tooling inventory and simplifies tool management, making it particularly advantageous in CNC machining centers and flexible manufacturing systems.

Drilling operations are inherently sensitive to tool deflection, chip evacuation efficiency, and thermal concentration at the cutting edges. Iscar's LOGIQ-3-QUICK drilling system (Fig. 2) addresses these challenges through a hybrid design that combines a rigid carbide drill body with exchangeable solid carbide drilling heads.

LOGIQ-3-QUICK heads are manufactured with material specific geometries, including optimised point angles, margin widths,

and cutting-edge preparations tailored to ISO P, M, and S material groups. The precision engineered internal coolant channels deliver high pressure coolant directly to the cutting zone, improving chip segmentation and evacuation while stabilising cutting temperatures. This design enables reliable drilling at depth to diameter ratios exceeding 5×D, even in difficult to machine materials.

Complementing LOGIQ-3-QUICK, Iscar's solid carbide drills featuring IC908 and IC948 grades provide enhanced wear resistance and torsional strength for high speed drilling applications requiring tight positional tolerances and superior hole quality. Together, these hole making solutions reduce cycle time, improve hole straightness and surface finish, and significantly extend tool life.

Iscar's milling and turning technologies emphasise geometry optimisation to control chip formation, reduce cutting forces, and enhance dynamic stability.

The HELI DO milling family incorporates double sided helical cutting edges that generate a gradual entry into the cut, reducing impact forces and suppressing chatter. The helical design promotes smooth chip flow and uniform load distribution along the cutting edge, making HELI DO cutters suitable for heavy roughing and high engagement milling operations. ▶

For high productivity milling, Iscar's FAST FEED cutters employ shallow axial depths of cut combined with extremely high feed rates. This strategy minimises radial cutting forces and spindle load while maintaining high metal removal rates. Iscar's FAST FEED technology is particularly effective in pocket milling and roughing operations where cycle time reduction is critical (Fig. 3).

In turning applications, NEODO inserts utilise double sided negative geometries with reinforced cutting edges and advanced chip breaker designs. These inserts offer high edge strength and thermal robustness, enabling stable machining in medium to heavy roughing operations involving steels and stainless steels. The increased number of usable cutting edges per insert also improves tool economy.

Iscar's tooling solutions are complemented by advanced digital machining and process optimisation platforms designed to support Industry 4.0 manufacturing strategies. Tool selection and parameter optimisation software utilise material databases, machine tool characteristics, and cutting mechanics models to recommend optimised machining strategies.

The use of digital twins enables predictive analysis of cutting forces, thermal loads, and tool wear progression, allowing engineers to identify optimal cutting parameters before machining begins. This data driven approach reduces trial and error, enhances process repeatability, and supports standardised machining practices across multiple production facilities.

In aerospace machining of titanium alloys, the combined use of SUMOTEC coated turning inserts and HELI DO milling

cutters has demonstrated tool life improvements of up to 40% and cycle time reductions of approximately 20%. These gains are attributed to improved thermal management, reduced cutting forces, and stable chip formation.

Automotive manufacturers which have recently applied LOGIQ-3-QUICK drilling systems in engine and transmission component production report consistent hole quality, extended tool life, and reduced tool change frequency, leading to improved overall equipment effectiveness.

In general engineering and subcontract machining environments, the implementation of LOGIQUICK modular tooling has resulted in substantial reductions in setup time and tooling inventory while maintaining tight dimensional tolerances and high surface finish quality.

Iscar's advanced metal cutting solutions provide a technically integrated approach to addressing the challenges of high mix, high precision manufacturing. Through innovations in SUMOTEC carbide grades and coatings, LOGIQUICK modular tooling, SUMOCHAM drilling systems, and optimised HELI DO, NEODO, and FAST FEED cutting geometries, Iscar enables manufacturers to achieve higher metal removal rates, improved tool life, and enhanced process stability. As manufacturing continues to evolve toward digitally connected and data driven production systems, Iscar's combination of advanced tooling and digital support technologies offers a robust and scalable foundation for next generation metalworking operations.

Contact Iscar South Africa on TEL: 011 997 2700 or visit www.iscar.com for further details. ■



Fig. 3 Iscar's FAST FEED technology is particularly effective in pocket milling and roughing operations where cycle time reduction is critical

This post goes out to all machine shops

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SA Agulhas 1 sold for \$1.020 million

Sold for scrap.



The SA Agulhas has fetched a price of \$1.020 million and reportedly will be dismantled and cut up for scrap

South Africa's iconic retired polar research vessel, the SA Agulhas I, has been sold at a court-ordered public auction in Durban for \$1.020 million.

The sale took place on Monday, January 26, following an initial scheduled date of January 22 that required reconstitution. The announcement of the sale and price achieved was posted on Solutions Strategists website. Details of the buyer have not been disclosed.

The sale of the SA Agulhas has drawn some criticism from the previous owners who contend that she was significantly undervalued and had more than scrap value. It seems, however, that the market has spoken. With the first round of bidding not yielding a result, auctioneer Ariella Kuper of Solution Strategists has confirmed that a reconstituted auction which drew interest from an additional bidder managed to secure a bid. The first auction of five bidders on 22 January failed to hit the reserve price. The second auction saw the vessel secure a bid of \$1 020 000 on the fall of the hammer.

The SA Agulhas I (IMO 7628136) was placed under judicial arrest in the Port of Durban after private operators encountered severe financial difficulties. The vessel was transferred from government ownership to J*S Maritime in 2024, with conditions aimed at supporting seafarer training programmes.

According to court proceedings, after completing two scientific charter voyages in the first half of 2025, mounting debts led creditors – including financial lenders – to initiate legal action for recovery of unpaid amounts. This escalated when crew members went unpaid for several months, constituting a maritime claim under South African admiralty law and prompting the arrest.

Efforts to resolve the situation, including a mid-2025 ownership transfer to HF Offshore Services Mexico, proved unsuccessful. On December 11, 2025, the Durban High Court ordered the sale of the vessel to satisfy creditors' claims and distribute proceeds accordingly. Solution Strategists were appointed as auctioneers.

The online auction via Microsoft Teams was held while the vessel was berthed at Berth 205 in the Durban International Container Terminal. Prospective bidders were required to register with a refundable deposit of \$50 000.

Built in 1979 by Mitsubishi Heavy Industries in Japan, the steel-hulled, ice-strengthened Antarctic supply and oceanographic research vessel measured nearly 112 metres in length, with a gross tonnage of approximately 6 123 tons and a range of 15 000 nautical miles. It could remain at sea for up to 90 days.

For over three decades, the SA Agulhas I served the Department of Forestry, Fisheries and the Environment as the backbone of South Africa's Antarctic and Southern Ocean research programme. It undertook regular supply runs to remote sub-Antarctic bases on Marion Island and Gough Island, as well as the SANAE IV base in Antarctica, while supporting scientific expeditions in some of the world's harshest maritime environments.

The vessel also served as a training platform for maritime cadets and students before its retirement from government service in 2012. It was replaced by the modern, purpose-built SA Agulhas II, commissioned the same year and operating primarily from Cape Town. The SA Agulhas II continues to lead South Africa's polar research efforts, including international collaborations. ■

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Simmer Engineering increases capability and capacity with the installation of a new, large-capacity DN Solutions Puma VTR1620M ram type vertical borer



Gauteng-based Simmer Engineering have recently installed a new, large-capacity DN Solutions Puma VTR1620M ram type vertical borer that positions the company in the large component machining category. The machine was supplied by the Retecon Group company Puma Machine Tools. Machine shop manager Rudolph van Tonder gives an idea of the size of the machine



New machine, new client, new work. This component – a blower fan that weighs 950kg and has a diameter of 1 950mm – is part of a new order that Simmer Engineering has recently acquired

Gauteng-based Simmer Engineering have recently installed a new, large-capacity DN Solutions Puma VTR1620M ram type vertical borer that positions the company in the large component machining category. The machine was supplied by the Retecon Group company Puma Machine Tools.

“For such a large-capacity machine it occupies a relatively small area of shop floor space. That is because the focus of the machine is on height and weight rather than length. The machine has X axis travel of 2 220mm and a Y axis travel of 1 200mm, which gives you a maximum swing diameter of 2 100mm, a maximum turning diameter of 2 000mm and a workpiece height of 1 800mm. The live tools power is 35kW, the ram size is 260mm by 260mm, the spindle chuck diameter is 1 600mm and the spindle motor power is 75kW,” said John van der Merwe, CEO of Simmer Engineering.

“It is also equipped with a BT50 tool utilising a 50mm taper spindle, designed for high-torque, precision, and rigid cutting operations in industrial applications. The spindle (table) can be indexed in increments of 0.001 degrees (0.001° C-axis) for precise positioning while machining, drilling holes, milling, as well as heavy cutting.”

“All of these functions enable us to perform fast and highly accurate mill, drill and tap operations to be performed in one setup.”

“The vertical borer often gets mixed up with a vertical turning center. They are very similar but there are some key differences. A vertical lathe is equipped with a turret (often CNC) that allows for multiple tools, making it better for automation and complex, multi-operation jobs. It is best used for turning, facing, and boring, often with automated tool changes. The orientation of the machine is that it has a vertical spindle/table.”

“Whereas a vertical borer is a ram-type machine, traditionally designed for heavy-duty material removal, particularly for enlarging or finishing large, pre-existing holes (boring). It is best used for machining large-diameter, heavy workpieces requiring high precision and rigid cutting, such as large rings, flanges, or casings. The structure of the machine typically features a large rotating table and a bridge-type structure.”

Gravity does the work

“One of the biggest advantages of the vertical borer is that it uses gravity to set and hold a piece in place, reinforcing work holding security and process stability. In a vertical borer the workpiece weight is directed straight down into the machine foundation and produces no off-axis loads on the spindle.”

“The use of gravity also allows for lighter clamping pressures, greatly reducing the risk of damage when machining delicate pieces. With the high demand for vertical bored machined ▶

parts in the energy, mining, and construction industries, you're ensured of a quick ROI for your business."

"A key feature of the robust, ram-type machine, traditionally designed for heavy-duty material removal, is its ability for enlarging or finishing large, pre-existing holes (boring). It is designed for large-diameter, heavy workpieces requiring high precision and rigid cutting, such as large rings, flanges, or casings."

"Typically, the machine features a large rotating table and a bridge-type structure."

"The machine can accommodate workpieces up to 10 tons, which is a relatively small number in terms of weight. But if you think about it clearly there are not many workpieces that are in that weight category that require machining. It is more about the height of the component that is critical."

"Besides we do not have the crane capacity to accommodate the very large castings."

"When installed the machine weighs approximately 42 tons. To accommodate this, we had to make the foundations two metres deep and also allow for a pit so that the roller bearings, for example, can be serviced from beneath the machine."

"The existing work that we have can keep the machine busy but we want to target the industries that require large castings to be machined. These are industries like power and mining. We have just signed a tender with Eskom and hopefully they are happy to give us more. I have planned a sales trip to the mining areas soon to introduce the new machine."

"To give you an idea of the capability of the machine a pump casing can now be machined in two operations without any new setups as compared to three previously. We have cut down on the time to thread impellers by approximately 45% and even though the machining is being done on a more expensive machine we are realising huge cost savings for our clients."

"Once you see the fully extended ram - higher than most human beings - you get an idea of the large geometry of the component that can be machined."

"We are always investing in new technology so we can be ahead of the competition. This machine has changed the game completely. To give you an idea on some of the other components that we machine on this machine, just by having the milling and drilling attachment and the driven tooling our on-time delivery has shot up by 97%."



The machine has X axis travel of 2 220mm and a Y axis travel of 1 200mm, which gives you a maximum swing diameter of 2 100mm, a maximum turning diameter of 2 000mm and a workpiece height of 1 800mm



"The machine can accommodate workpieces up to 10 tons, which is a relatively small number in terms of weight. But if you think about it clearly there are not many workpieces that are in that weight category that require machining. It is more about the height of the component that is critical."

"Another example is a component that got setup on a conventional boring mill and it would take 90 to 120 minutes to do the turning and then we would have to set it up on a machining machine. The actual machining - drill and tap - would only take about 15 minutes but the setup time would be about 60 minutes."

"Now we do the whole job of the same component in 25 minutes. Incredible time saving."

CMM installation

"In keeping with our strict Quality Management System that has been developed to encompass industry standards and a wide range of approvals we invested in a precise shop floor CMM. The purchase of Aberlink's Azimuth CNC CMM will now enhance the purchase of the DN Solutions Puma VTR1620M ram type vertical borer as the majority of the components that we will be targeting to machine will require CMM certification."

"We specifically added CMM capabilities to our offerings because not many companies in our area of machining have CMM capabilities. This is a big advantage."

Contact Simmer Engineering on TEL: 011 865 3403 or visit www.simmer.co.za for further details.



Simmer Engineering invested in an Aberlink Azimuth CNC CMM that was installed in a purpose-built temperature-controlled room so as to offer clients a CMM service which is being called for regularly these days

Hitech-Gregfor's move to a brand-new location has opened up endless possibilities

As the demand for secure and scalable data storage and processing reaches unprecedented heights, Hitech-Gregfor have kept apace.

“When you visited us 10 years ago at our Laser Park factory, Amada had just installed a flexible manufacturing system that includes material storage and handling, a fiber laser, a punch/laser combination machine and a panel bender. It was all to do with productivity and efficiencies for capabilities at the time. Little did we know what it would lead us to,” explained Hitech-Gregfor's MD Henry Bushney.

“The business has gone from a racking business and diversified into being one that offers a complete data centre integration solution, where you walk into a data centre that is fully populated with cabinets, containment, cable trays, power, cooling, gensets outside and more that is either manufactured by ourselves or we source what is needed. Lithium-ion batteries for example. It's a full turnkey solution, including civils and mechanical aspects, which makes it a really intense solution that we offer.”

“Behind it comes our technical team, which includes the design around it, the structural and mechanical engineers to sign off the infrastructure operations, and those that clean site, as well.”

“Clients are different. Some do bricks and mortar and others want a modular setup. Where possible we manufacture everything in-house and then we will put it together, we do all our levels of testing up to 5, depending on the project and client requirements.”

“Because it is manufactured on a modular basis, we can easily dismantle the whole system, wrap it, and then construct it again on-site.”

“That is a very simple description of what we actually do.”

“Many of the data centre clients that we deal with have been growing their businesses to include data storage solutions that are interconnected with all their facilities.



“One of the standouts, which is in keeping with our automation ambitions, is the Amada Ventis 3015 AJ 4kW fiber laser, which has been automated with a ASFH 3015G tower storage system for material storage and material handling. The tower has 10 shelves and can store up to 2 tons of material per shelf. This allows for long, continuous operation with no interruption in loading/unloading of material.”

Often these facilities require significant upgrades and improvements to expand their capacity. The enhanced facilities have to meet data centre site requirements with supporting power solutions – all of which have to be configured to fit into a very limited space and accommodate a restricted on-site installation time.”

“Because the modular units are built off site, we then have to manage the complex logistical project of delivering and rigging the weighty units by road, possibly using specialised trucks and air-suspension loading trailers, and then lifting ▶



Introduced in 2021 the Brevis 1212 AJ fiber laser provides the versatility of a production-quality laser in a compact design. The Amada Brevis 1212 AJ compact 3kW fiber laser is suitable for high-mix/low-volume production, with a maximum sheet size of 1 250mm by 1 250mm



New Amada press brakes have also been arriving regularly and Hitech-Gregfor now have a bank of Amada HG, HDS, FBD & RG machines. The more recent arrival of a few HRB 1303 press brakes takes Hitech-Gregfor up to 15 Amada press brakes



Hitech-Gregfor have recently installed an Amada ENSIS 3015 6kW fiber laser that has been paired with an Amada MPL 3015 C manipulator that incorporates a shuttle table function

them into place on-site with specially hired large cranes.”

“Apart from the physical requirements, we are expected to offer stability and reliability under all environmental and power supply conditions, in a robust prefabricated structure. We install the latest power distribution and protection technologies to optimise the performance of any installation while keeping personnel and equipment safe. Adequate load handling capabilities are essential, as well as ease of operation and maintenance.”

“The solution that we are expected to offer is total integration into one system with an approach intended to protect the data centre from the repercussions of inconsistent power supply and the ongoing load shedding, or power blackouts, that South Africa has become accustomed to. The turnkey solution usually includes medium voltage switchgear and in many cases Lithium-ion battery combinations.”

“We have our own basic design which is an integrated design with advanced cooling, power, monitoring and security features for our customers. But many of the POP (point of presence) containers are also custom designed. As we have said before the container will include all the electronic equipment needed and the other necessary equipment. It could even include a raised floor to accommodate a water-cooled system which connects directly to integrated cooling within each equipment rack.”

“The modular design of these data centres allows for rapid deployment and scalability. Additionally, the use of modular construction takes into consideration the environmental impact of the data centres, as they can be easily disassembled and relocated if necessary.”

“The data centres are equipped with the latest cooling and power management technology, allowing

them to operate at maximum efficiency and reduce energy consumption.”

“POP containers are deployed to areas that generally speaking do not have the city infrastructure setup. They act as a fibre distribution centre for anything between 10 000 and 15 000 users. The fibre work, which we have been very successful in, could include trenching or overhead cabling, all of which we do.”

“More often than not there will be a number of these POP containers placed in an area and then they all have to be linked and secure. Some of these container housings are now incorporating solar panels as well. Besides the security aspects, a big influencing factor is that the containers have to be configured to fit into a very limited space and accommodate a restricted on-site installation time.”

“Due to the nature of our business, on-site installation time is generally limited to final assembly and cable connections only.” ▶



“We have also decided to invest in five hand-held laser welding systems from Hugong HGLW and supplied by TRM Supplies because of the potential it offers in our shop environment that we operate in. Manual fiber laser welding will never replace the traditional MIG and TIG welding processes. Each individual unit has its own closed enclosure so there are no safety issues.”



A partial view of Hitech-Gregfor’s 17 000m² facility

Expansion – new custom built manufacturing facility

“Although we work to a modular format some of our container requirements are large and this was becoming a major headache for us. Our 18 metre long containers were very difficult to manoeuvre at the old factory and we also had limited manufacturing space with no room to expand.”

“When we started the business there were three partners involved – myself, Rogers Naidoo and Hein Vorster, who was CEO at the time.”

“Hein was very influential in making our ‘Lights-Out’ project a reality. He wanted to keep sheets and parts moving with automation. However, he decided to emigrate to Australia in 2020 and Rogers and myself purchased his shareholding and became equal partners.”

“We knew that if we wanted to grow, we had to expand our capabilities and capacity. So in 2023 we found a site in Kya Sands, Gauteng, which we purchased, that only had 1 000m² of office space on it and we put our plans into action.”

“As we had a greenfield situation, we could custom design



Joint owners Henry Bushney and Rogers Naidoo

our space for manufacturing while at the same time upgrade the office space. We have built a 17 000m² facility which now also includes a spray booth and shotblasting capabilities. We used to outsource spray painting and shotblasting so you can imagine what the cost of transport to and from the supplier was that we are now saving.”

“At our previous factory the ‘Lights Out’ flexible manufacturing system dominated the factory. It does include the Amada MARS storage system, a centrally located material ‘hub’ that provides storage and distribution of raw materials and blanks on demand. The system includes an automated material handling conveyor and pick-and-place system which consists of 14 vertical sections with each section divided into 12 shelves. Each shelf is capable of holding two tons of material that is stored according to client preference and production. Additionally, it includes the Amada Acies 2515 punch laser combination machine, the Amada EP 2500 AL panel bender and the Amada FOL 3015 AJ fiber laser. Now this flexible manufacturing system, still working on a ‘Lights Out’ basis, takes up a relatively small area of the factory.”

“We also have another 7 000m² of land to expand into.”

“As it is a recent build, we have been able to maximise and incorporate all the latest technologies that are currently available to run a manufacturing plant of this size. For example, we have 5 000 solar panels on the roof which gives us 1 megawatt of energy that is divided into two 500kVA phases to give us maximum performance and savings.”

New Amada equipment

“With all the space that is now available to us we have been able to streamline and maximise production time and add new equipment and we have purchased a number of systems, lasers and press brakes from Amada since we moved in.”

“One of the standouts, which is in keeping with our automation ambitions, is the Amada Ventis 3015 AJ 4kW fiber laser, which has been automated with a ASFH 3015G tower storage system for material storage and material handling. The tower has 10 shelves and can store up to 2 tons of material per shelf. This allows for long, continuous operation with no interruption in loading/unloading of material.”

“We have also installed an Amada ENSIS 3015 6kW fiber laser that has been paired with an Amada MPL 3015 C manipulator that incorporates a shuttle table function. The combination of the two machines provides a flexible automation solution that reduces unnecessary machine downtime due to manual material loading.”

Press brakes

“New Amada press brakes have also been arriving regularly and we now have a bank of Amada HG, HDS, FBD & RG machines. The more recent arrival of a few HRB 1303 press brakes takes us up to 15 Amada press brakes that we have working for us.”

“We have kept buying the same model machines because of what we are processing and for operator friendliness.” ▶



“At our previous factory the ‘Lights Out’ flexible manufacturing system dominated the factory. It does include the Amada MARS storage system, a centrally located material ‘hub’ that provides storage and distribution of raw materials and blanks on demand. The system includes an automated material handling conveyor and pick-and-place system which consists of 14 vertical sections with each section divided into 12 shelves. Each shelf is capable of holding two tons of material that is stored according to client preference and production. Additionally, it includes the Amada Acies 2515 punch laser combination machine, the Amada EP 2500 AL panel bender and the Amada FOL 3015 AJ fiber laser. Now this flexible manufacturing system, still working on a ‘Lights Out’ basis, takes up a relatively small area of the factory.”

Amada Brevis 1212 AJ compact fiber laser cutting machine

“The Amada Brevis 1212 AJ compact 3kW fiber laser is loaded with a diverse range of machine features to support high-speed processing, easy material loading, with a footprint and capacity to efficiently accommodate small cell manufacturing.”

“Only introduced in 2021 the Brevis 1212 AJ fiber laser provides the versatility of a production-quality laser in a compact design. It features reliable, high-speed laser cutting, simple material loading, and an optional rotary index to process 3D material such as tube or pipe. Engineered for manufacturing flexibility, the machine is suitable for high-mix/low-volume production, with a maximum sheet size of 1 250mm by 1 250mm.”

“The machine gives us a bit more flexibility with cutting smaller components.”

New direction – investment in 5 Hugong HGLW hand-held laser welding systems

“We have also decided to invest in five hand-held laser welding systems from Hugong HGLW and supplied by TRM Supplies because of the potential it offers in our shop environment that we operate in. Manual fiber laser welding will never replace the traditional MIG and TIG welding processes.”

“As we bring more and more processing operations in-house you have to look at new services to make you more productive and produce more. On the sheet side we are now processing 100% of our requirements. Combine this with the fact that we have broadened our product base, in keeping with this trend we have added more manufacturing services.”

“We now have five units. Each individual unit has its own closed enclosure so there are no safety issues.”

“Handheld fiber lasers, commonly used for welding, cutting, and cleaning, are Class 4 laser devices, which are the most hazardous type and can cause immediate, irreversible damage to eyes and skin. Because these devices are portable and often used in open workshops rather than enclosed cabinets, they present significant safety risks.”

“All this capacity growth has also seen our staff numbers spike. We now have 235 staff as compared to 110 at the previous facility. Another positive for us.”



Hitech-Gregfor has gone from a racking business and diversified into being one that offers a complete data centre integration solution, where you walk into a data centre that is fully populated with cabinets, containment, cable trays, power, cooling and gensets outside

About

Hitech-Gregfor focuses on the provision of data centre infrastructure, communication cabling and managed services. Since opening its doors in 1992, Hitech Gregfor’s offerings have evolved and grown beyond the initial production of manufacturing steel products, such as 19 inch enclosures

used to house server equipment, UPS battery enclosures and small electronic enclosures. Today the company offers aisle containment solutions, enviro rack solutions (computer room in a rack), data centre infrastructure, auditing of current infrastructure, precision cooling and power management, integrated security incorporating camera monitoring and access control, environmental monitoring and preventative maintenance, modular containerised data centres, communication cabling – auditing of current infrastructure, installation of new environments, incorporating structured copper and fiber solutions and the maintenance thereof, managed services and preventative maintenance.

Contact Hitech-Gregfor on TEL: 011 794 1724 or visit www.hitech-gregfor.co.za for further details.



Hitech-Gregfor’s new facility in Kya Sands, Gauteng

Lead Machine Tools takes occupation of new premises, celebrates 15-year milestone

Established in 2011, Lead Machine Tools has been recognised as one of South Africa's fastest growing machine tools and related equipment suppliers. Not only does 2026 see the company proudly celebrate 15 years in business, but it has also purchased and moved into a new 1 000m² premises in Epping, Cape Town.

Lead Machine Tools' offering has been built on partnerships with manufacturers from leading machine tool and related equipment suppliers from around the world. The company represents multiple OEM's from Europe to Taiwan, China and Japan to provide equipment across key segments of modern machine shops. Brands include ZOPO Intelligent Equipment Co., Ltd.'s intelligent milling and turning systems, Hwacheon Machine Tool Co., Ltd.'s universal and heavy turning equipment, the Micro Dynamics line of vertical and 5-axis machining centers, and China-based fiber laser cutting technology from Glorystar, meeting the requirements of local industries with a range of machine shop, job shop and production materials customers.

The company supplies, installs and supports a variety of computer numerical control (CNC) accessories from leading brands such as Siemens and Fanuc as well as conventional machines and related equipment, vertical machining centers, horizontal turning centers and bridge type machining centers.

Additional brands represented by Lead Machine Tools include Golden Sun with their 4th and 5th-axis rotary tables, Hwacheon Machine Tool Co., Ltd.'s range of machine tools that include machines that offer sub spindles and driven tools, Micro Dynamics' range of machines including vertical machining centers, vertical pallet changing machines and 5-axis machining centers. Micro Dynamics has built a reputation as a machine tool manufacturer with some of the most powerful yet compact machining centers on the market that offer precision but don't necessarily require months of negotiations with your bank manager.

Lead Machine Tools also offers China-based fiber laser equipment company Glorystar's CNC fiber laser machines, laser welding machines, fiber marking lasers and hydraulic press brakes, and Zhejiang Kaida Machine Tool Co., Ltd.'s Miumac range of lathes that includes conventional lathes and CNC heavier-duty flatbed lathes.

Other suppliers include Mitsubishi Electric's series of electrical discharge machining (EDM) and wire EDM machines, TAILI's plastic injection moulding equipment, NPC injection moulding machines and Zhengzhou Timeway Machine Tool Co., Ltd.'s surface grinders.

"Lead Machine Tools is a Level 2 B-BBEE contributor which



Mark Burn, Lead Machine Tools' General Manager stands outside Lead Machine Tools' new building that the company has purchased and moved into. Fittingly, the building features a number of turrets as part of its architecture

has gained rapid success with the acquiring of sole agencies in the likes of ZOPO Intelligent Equipment Co., Ltd., with over 200 machining and turning centers sold already," says Mark Burn, Lead Machine Tools' General Manager.

"Another being Micro Dynamics, a manufacturer of high-speed, high-quality, heavy duty machining centers incorporating features such as powerful 31kW / 15 000RPM spindles, 5400 block look ahead and dypec thermal compensation. On the Lathes side, we have a vast range of affordable conventional and CNC flatbeds available from Kaida."

"In the last couple of years, we have ventured more seriously into the supply of sheet metal machinery. We represent Glorystar, suppliers of good quality laser cutting machines and CNC press brakes."

"Also, we are pleased to announce that we have added two newly renovated rooms in our castle, a temperature-controlled metrology / inspection room and a clean room for spindle service / spindle re-builds."

"Lead Machine Tools is reputedly known to accommodate customers with the acquiring of a great machine at most levels of affordability on the price table and a variety of machinery is open to view on our showroom floor," said Burn.

Lead Machine Tools likewise supplies Renishaw probing/laser systems and software for machining accuracy, testing, repairs and maintenance.

One brand the company says has been doing particularly well in the South African market over the last few years is ZOPO Intelligent Equipment Co., Ltd. Notably a number of installations of ZOPO's bridge type heavy-duty machining centers have been installed at some of South Africa's largest machine shops that include OEM equipment manufacturers operating in the heavy equipment manufacturing and rail transport industries.

A push in coordinate measuring machines

Measuring solutions such as coordinate measuring machines (CMMs) and portable arms reflect the industry-wide push toward in-process inspection and quality assurance. More and more customers around the world are demanding exacting standards of big and small machine shops alike.

Lead Machine Tools says that they have seen an increase in interest and sales of CMM's as more machine shops are beginning to realise the importance of not just quality control but precision engineering and the resultant orders that having this kind of equipment on the shop floor can bring in.

This is an area of heightened focus for the company and within their new premises Lead have installed a dedicated ▶

metrology room where they will be able to offer on-site calibration for customers for certain CMM equipment as well as offer a physical showroom for customers to view in-stock products and compare CMM's.

A brand that Lead Machine Tools are excited to be representing is COORD3's range of CMM's. While there are not a huge amount of COORD3 machines currently installed in South Africa, Lead believes the scope for the range is substantial, with some machines already on the shop floors of certain of South Africa's leading precision engineering shops operating in the medical and aerospace industries.

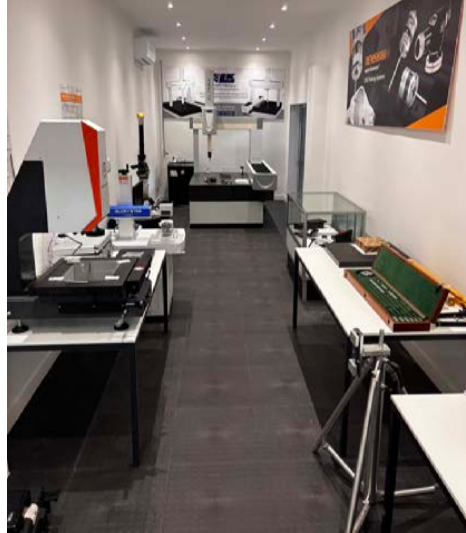
Lead Machine Tools also supply Tomelleri Engineering's Articulated Measuring Arms and have invested in the calibration equipment to take care of that aspect of servicing Tomelleri equipment across South Africa.

Lead have also incorporated a temperature-controlled clean room for in-house spindle service / spindle re-builds at their new premises.

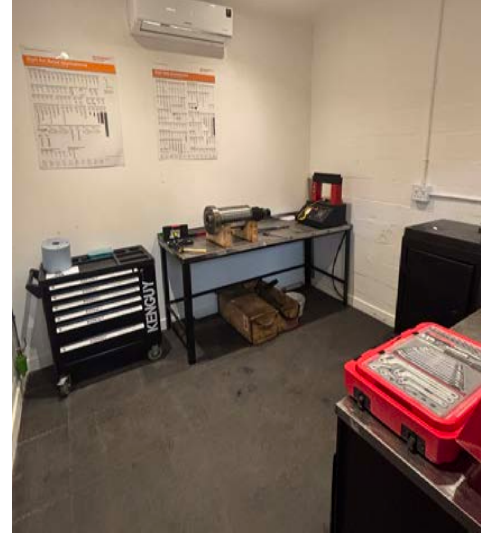
Lead Machine Tools' portfolio covers a wide range of machine shop needs including CMM's and portable measuring arms, surface grinders, conventional milling machines (horizontal and vertical), CNC vertical and turning machining centers, including premium and

economy lines, 5-axis machining centers, CNC laser cutting and plasma systems, press brakes and injection moulding equipment, large lathes and bridge type machining centers, horizontal borers, EDM and WEDM systems, 4th and 5th-axis rotary tables for advanced workholding and multi-axis applications.

Contact Lead Machine Tools on TEL: +27 21 301 2159 or visit <https://www.leadmachinetools.co.za> for more information. ■



Lead Machine Tools has established a dedicated metrology room at its new premises where they will do live CMM demonstrations as well as be calibrating their Tomelleri 6-axis arms in-house using special calibration equipment



Lead Machine Tools have incorporated a temperature-controlled clean room for in-house spindle service / spindle re-builds at their new premises



High-grade carbon steel
Ck 101 (AISI 1095)
hardened, 6 - 12.7 - 25
and 50mm wide

High-grade stainless steel
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X12CrNi17 7 (AISI 301),
cold-rolled to spring grade hardness,
100 and 150 mm wide

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CuZn37 (C 27400), hard, 150mm wide

Extremely close dimensional tolerances T3

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ITAC decides not to impose provisional safeguard duties on imports of corrosion resistant steel coil – thick gauge

ITAC (The International Trade Administration Commission of South Africa) has made a preliminary decision not to impose a provisional safeguard duty on imports of corrosion-resistant steel coil, following a preliminary determination in an ongoing investigation into the surge of imports.

The investigation was gazetted on July 25, 2025, in response to an application from ArcelorMittal South Africa, which is a major producer of the subject product within the Southern African Customs Union (SACU). The application is supported by SAFAL Steel, the other SACU-based producer.

These steel coils are widely used in key downstream industries such as construction, roofing and cladding, appliance manufacturing and the automotive and engineering sectors. Their quality and corrosion-resistant properties make them a critical input for structural and fabricated steel applications, ITAC points out.

Following a thorough review of the comments from interested parties and the applicant, among other reasons, the commission found that the surge in imports is the result of unforeseen developments and is recent, sudden, sharp and significant; and that the SACU industry is experiencing

serious injury owing to this surge.

The commission considered that the applicant is experiencing serious injury in the form of a decline in net profit, market share, price suppression, price depression and negative cash flow.

However, other injury indicators such as sales, output, capacity use and employment show growth and operational stability; therefore, the commission made a preliminary determination that there are no critical circumstances to warrant immediate action to prevent damage, which would be difficult to repair.

Safeguard measures are trade remedies permitted under the World Trade Organisation Agreements and South Africa's domestic legislation.

They are designed to provide temporary relief to a domestic industry facing a sudden and damaging surge in imports, giving it time to adjust to the increased competition.

Interested parties were invited to submit comments on the decision to ITAC by 13 February 2026.

There has been no further media statement by ITAC subsequently. ■



Steel industry group makes move to get involved with running ArcelorMittal's struggling South African unit

The proposal aims to strengthen local supply and manufacturing.

South African steel processors have approached the country's biggest development-finance institution with a proposal to help take control of ArcelorMittal's struggling South African unit, it is said in a statement by Bloomberg, citing sources.

The industry group, which has six members including labour unions, made a proposal to the state-owned Industrial Development Corporation (IDC) and includes local processor Allied Steelrode, according to people familiar with the matter.

The IDC has been locked in talks with ArcelorMittal since November 2023, when the global steel giant said it planned to shut two steel mills at the unit that produces grades that are crucial to South Africa's key automotive and mining industries.

The IDC – the second-biggest shareholder in ArcelorMittal South Africa, or AMSA – has loaned the company money and said it wants to boost its stake from a current interest of about 8% to preserve the nation's industrial capacity. The group being considered as a strategic equity partner consists of South African companies and would bolster local ownership of manufacturing capacity, said the people who asked not to be identified because the talks are private.

AMSA referred queries to the IDC. The development institution said there are no updates regarding the steelmaker. Johannesburg-based Allied Steelrode referred queries to AMSA and the IDC.

Under the arrangement, the IDC would provide finance and take an increased stake, while ArcelorMittal could retain a shareholding for a limited period, the people said.

Talks between the IDC and ArcelorMittal fell apart late last year when the steel company rejected an informal proposal of about R8.5 billion, which would have included the repayment of R7 billion in debt to the South African unit's parent. The assets will also have to be revalued, said the people.

Nedbank Group is running the process to select a strategic equity partner, or SEP, to part fund and mainly run the operations on behalf of the IDC, said the people. It's compiling a shortlist, with Allied Steelrode a serious contender, they said.

"For the IDC, a key feature of complying with its internal policy entails running a public process to identify a SEP pursuant to a potential transaction in a manner that is administratively fair," Nedbank said in an email to one prospective bidder late last year. "All interested parties are to be given an equal opportunity." Nedbank declined to comment.

Allied Steelrode processes bulk steel into specialised components for the automotive, mining, construction and agricultural sectors, according to its website.

AMSA has now closed the two steel mills and an iron-ore mine. It still operates a mill in Vanderbijlpark, south of Johannesburg, which produces steel sheets and other products and has idled facilities in the capital, Pretoria, and in the west coast town of Saldanha.

AMSA, formerly known as Iscor, was acquired by Indian billionaire Lakshmi Mittal in 2003. Mittal in 2006 combined with Arcelor to form ArcelorMittal. ■

South Africa looks at increased tariffs on vehicle imports from India and China

South Africa is considering imposing import tariffs of as much as 50 per cent on vehicles brought in from India and China, as the government moves to counter the growing impact of foreign-made cars on its domestic automotive industry.

The proposal is being examined by the Department of Trade, Industry and Competition, which is reviewing the current tariff framework to curb rising imports that policymakers say are undermining the competitiveness of local manufacturers.

According to a Bloomberg report, officials are exploring changes to import duties to align them more closely with World Trade Organisation rules for most-favoured nations.

Ayabonga Cawe, commissioner of the International Trade Administration Commission, told lawmakers in Cape Town that South Africa's bound tariff rate for fully built passenger vehicles stands at 50 per cent. He said there was also limited scope to adjust duties on automotive components, with potential rates ranging between 10 per cent and 12 per cent depending on the country of origin.

India and China have become South Africa's two largest sources of imported vehicles, together accounting for three-

quarters of total vehicle imports in 2024. Data show that India supplied 53 per cent of imports last year, while China accounted for 22 per cent, prompting growing concern among industry stakeholders.

Vehicle imports from China have increased sharply, rising by 368 per cent over the past four years, while imports from India have climbed by 135 per cent over the same period. The strongest pressure has been felt in the entry-level segment of the market, where cheaper imports are squeezing margins for local producers.

As part of the review, the trade department is expected to hold discussions with the National Treasury on additional fiscal measures. Options under consideration include new excise duties on luxury vehicles and revisions to the existing rebate credit certificate system used within the automotive sector.

The move comes despite China, India and South Africa all being members of the BRICS grouping, which has emphasised deeper trade and economic cooperation. Any decision to raise tariffs could therefore carry broader trade and diplomatic implications, even as Pretoria seeks to protect jobs and investment in its automotive industry. ■

Competition Commission raids premises of four scrap metal companies

On 13 February 2026, the Competition Commission (the Commission) conducted search and seizure operations at the premises of four scrap metal purchasing companies operating in Germiston, Nigel, Vanderbijlpark, and Hammanskraal.

The Commission says it has reasonable grounds to suspect that Scaw South Africa (Pty) Ltd, Cape Gate (Pty) Ltd, Shaurya Steel (Pty) Ltd trading as Force Steels and Unica Iron and Steel (Pty) Ltd have engaged in fixing the purchase price of shredded or processed scrap metal. It is alleged that these firms have made price adjustment announcements of the same amount for implementation at more or less same time. This conduct may amount to fixing of prices and/or trading conditions in contravention of section 4(1)(b)(i) of the Competition Act 89 of 1998, as amended (“Act”).

The search and seizure operations are being conducted as part of an ongoing investigation of a complaint lodged by a third party in 2023 and a complaint initiated by the Commissioner in February 2026. During the search, the Commission seized documents and electronic data, which will be analysed together

with other information gathered to determine whether these companies have contravened the Act. The companies under investigation operate as buyers of shredded or processed scrap metals, which they use in the production of long steel products.

In terms of section 48 of the Act, the Commission is authorised to enter and search premises and seize documents that have a bearing on its investigation. The Commission

obtained a search warrant from the North Gauteng (Pretoria) High Court authorising it to enter, search the premises of these companies and seize information having

a bearing to the investigation. The search and seizure operation is conducted with due regard to the rights of all affected persons.

“Scrap metal forms part of the industrial intermediary products, which is the Commission’s priority sector. Dismantling any alleged price-fixing cartel in the market will go a long way towards eliminating any existing artificial barriers to entry and creates a conducive environment for all firms, in particular small businesses and firms owned by historically disadvantaged persons, to enter and participate in the market,” said Commissioner Doris Tshepe. ■

The companies under investigation operate as buyers of shredded or processed scrap metals, which they use in the production of long steel products.

Cape Gate says CompCom raid is unlawful

Company says it has done nothing wrong and will approach the high court to have the warrant set aside. Scrap metal trader maintains innocence, calls search warrant unlawful.

Scrap steel producer Cape Gate says the Competition Commission (the Commission) carried out an unannounced raid on its premises as part of a wider inquiry into anti-competitive behaviour in the industry. The company says it has always cooperated fully with the Commission and had previously made all requested documents and information available, adding that it takes its obligations to comply with the law seriously.

Cape Gate says it will approach the Pretoria High Court on an urgent basis to set aside the warrant on which the raid was based.

“We are confident that our business practices are fully compliant with competition law. We strongly deny any wrongdoing,” says Cape Gate CEO Dorothea Ziegenhagen.

The inquiry follows ‘unsubstantiated’ complaints made by a third party to the Commission in 2023, says the company.

“There was a clear obligation on the Commission to fully disclose all relevant facts to the court. Cape Gate believes that the Commission has failed to make full disclosure as required,” said the company.

In October 2025, Cape Gate was found guilty of price fixing by the Competition Tribunal. This was over complaints made in the 2000’s that some buyers of scrap metal were colluding to fix the price of scrap metal until 2008.

ArcelorMittal SA and Columbus Stainless, two of the companies named in that investigation, admitted liability and settled with the Commission. Scaw was granted corporate leniency, while Cape Gate denied the allegations.

The Commission argued before the Competition Tribunal that the accused firms operated as a buyers’ cartel, using the same pricing formula and premium when buying scrap metal from scrap merchants.

Says Cape Gate: “In relation to the 2025 Competition Tribunal decision regarding scrap purchasing in the period 2000 to 2008, Cape Gate maintains its stance that the Tribunal’s judgment is incorrect and that there has not been contravention of the Competition Act. In this regard, Cape Gate has launched both review and appeal proceedings against the Tribunal’s decision, which are currently sub judice and will be heard in the Competition Appeal Court during the first quarter of 2026.”

The search and seizure operations followed a complaint made by a third party in 2023, and another by the CompCom commissioner in February 2026. Cape Gate says it provides a livelihood to thousands in the steel industry, and is committed to responsible business practices in a sector that has been under severe economic pressure for years. ■



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A new chapter in surface engineering at Somta Tools

In the early 2000s, Somta Tools made a decisive investment that would shape its technological trajectory for decades to come – the acquisition of one of the most advanced Physical Vapour Deposition (PVD) coating systems in South Africa at the time. This was more than a capital purchase. It was a strategic commitment to surface engineering excellence at a time when local access to high-end coating technology was limited. The system immediately positioned Somta at the forefront of thin-film hard coatings in the region.

From production support to technical capability leader

For many years following its installation, the PVD system primarily supported Somta's core business: high-performance cutting tools. Production tooling – drills, taps, end mills and specialist cutters – benefited from advanced coatings that enhanced hardness, wear resistance, and thermal stability.

Selective commercial coating work was also undertaken,

but the dominant focus remained internal, ensuring that Somta's tooling met the demanding requirements of modern machining environments.

The coatings developed and refined during this period gave Somta a strong reputation for reliability and consistency – particularly in challenging applications where heat, friction, and wear resistance are critical.

A broader strategic vision

With the OSG Group from Japan becoming a major shareholder in Somta, the long-term vision for the coating division began to expand. While production tooling remains central, the strategic emphasis has increasingly included job coating for external customers across diverse industries. This shift required more than capacity – it required application-specific expertise.

To support this transition, Dr Jeff Ferreira, former Director of TD Coating Centre, was brought on board. His experience in commercial coating operations and application development has strengthened the team's ability to adapt coating technology beyond traditional cutting tools.

"Together, the Somta PVD team has focused on refining processes, qualifying substrates outside of high-speed steels and carbides, and ensuring that coating adhesion, residual stress management, and surface preparation protocols are optimised for varied component geometries and materials," said Ferreira.

Innovation beyond cutting tools

"One of the most notable developments has been the introduction of new coatings specifically engineered for metal pressing and forming operations. A TiAlCN-based coating system – tailored for high-load sliding and galling resistance – is showing strong performance in metal stamping applications. For companies engaged in high-volume presswork, where tool wear and adhesive transfer are persistent challenges, this development offers measurable improvements in tool life and surface finish consistency," explained Ferreira.

"The move into press tooling reflects a broader understanding. PVD is not confined to machining tools. When correctly engineered and applied, thin-film coatings can dramatically influence productivity across multiple manufacturing disciplines," continued Ferreira. ▶





Serving diverse industries

“Today, PVD coating technology extends well beyond the machine shop. From military components requiring controlled surface properties, to injection moulding tools demanding wear and release performance, the scope of application is wide.”

“Somta’s capability now positions it to assist companies across sectors – not only by applying coatings, but by collaborating on surface engineering solutions tailored to specific operational demands.”

Looking forward

What began in the early 2000s as a bold investment in advanced coating equipment has evolved into a mature, technically capable surface engineering platform. By combining world-class equipment, international partnership alignment, and experienced leadership, Somta’s PVD division is entering a new phase – one that balances production excellence with commercial collaboration.

“Surface engineering is no longer just a supporting function. At Somta, it is becoming a strategic enabler for South African industry,” concluded Ferreira.

For more details contact Somta Tools on TEL: 011 390 8700 or visit www.somta.co.za ■



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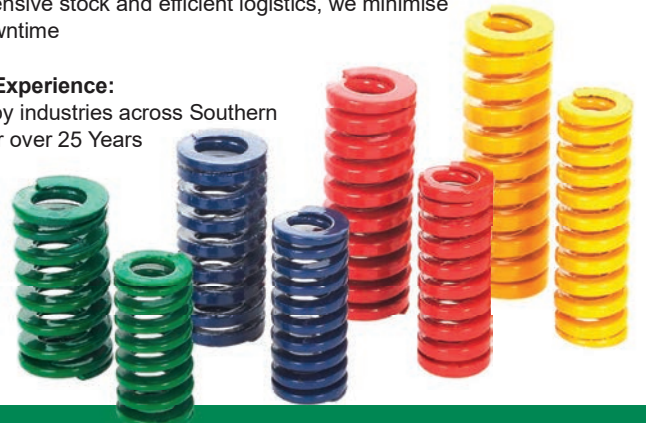
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Transalloys calls for electricity tariff relief

Transalloys, a manufacturer of manganese ferroalloys at a smelter complex in Emalahleni, Mpumalanga, has again warned that its operations are at risk of closure should the electricity tariff relief granted and being contemplated for the ferrochrome sector not be extended to other ferroalloy producers. Electricity remains the company's single largest input cost and the decisive factor in determining global competitiveness in very competitive ferroalloy markets, he said.

Ahead of the budget, Transalloys chief executive Konstantin Sadovnik said in a statement he was not optimistic that meaningful electricity tariff relief for the wider smelting sector will be announced.

Should no tariff relief be forthcoming, the company will be compelled to retrench approximately 600 employees, placing an estimated 7 000 livelihoods at risk. Transalloys is the last remaining manganese smelter in South Africa and contributes around R2.5 billion annually to the eMalahleni economy through the procurement of local goods and services.

"Beyond the immediate job losses and downstream economic impact, shutting down the plant would wipe out a R5 billion strategic asset," Sadovnik said. "It would represent an irreversible loss of manganese beneficiation capacity in a country that holds roughly 80% of the world's known manganese resources and severely damage investment climate in South Africa."

While ferrochrome smelting has received tariff relief, silicomanganese smelting is approximately 30% more energy-intensive, Sadovnik noted. "If Transalloys is granted relief on par with that expected for ferrochrome, manganese smelting can be saved," he said. Earlier, Glencore chief executive Gary Nagle expressed confidence that the ferrochrome sector's requirement of a 62c per kilowatt-hour energy tariff would be met before the end of February.

Sadovnik said a 62c per kilowatt-hour tariff would align with the 3 to 4 US cents per kilowatt-hour range paid by globally competitive smelters in jurisdictions such as the United States, Norway and Malaysia. "Ironically, South Africa is losing competitiveness to countries that lack our resource base but have proactively structured energy solutions to capture the socio-economic benefits of beneficiation," he said.

A tariff reduction contemplated by Glencore, Sadovnik emphasised, would serve as an interim measure. "It is an immediate bridge while a long-term energy solution is being developed. It would provide much-needed breathing space, not only for Transalloys but for the broader ferroalloys sector," he said. He added that both short-term relief and long-term reform must be considered within the broader



Transalloys smelter. Picture Angie Lazaro, Transalloys

fiscal and industrial policy framework likely to be outlined in the Budget. "Electricity pricing reform for energy-intensive sectors is not a concession. It is an investment in preserving productive capacity, export earnings, tax revenue and maintaining an attractive investment climate. A competitive framework strengthens the national balance sheet over time," Sadovnik said.

He noted that the ferroalloy value chain is widely reported to support approximately 300 000 direct and indirect employment opportunities. "A consolidated ferroalloys sector likely represents the largest Eskom's customer; smelter closure, conversely, would have a domino effect forcing Eskom to cut back power generation, spreading its fixed costs and huge debt burden over smaller number of paying customers, and consequently pushing the upstream coal miners to close," he said.

Transalloys has engaged Eskom, government and other stakeholders since October last year to secure a workable electricity tariff solution. Over time, escalating tariffs have rendered ore beneficiation in South Africa structurally uncompetitive.

"Timing is now critical," Sadovnik said. "Without certainty, the company will be compelled to act. With it, we have an opportunity to protect jobs, preserve industrial capability and contribute to growth."

Transalloys is the leading producer of manganese ferroalloys, an essential input into steel manufacture. The major breakthrough for manganese came when Sir Henry Bessemer used manganese as a deoxidising agent in the steelmaking process he developed in 1860 that bore his name. The primary use of ferromanganese is as a type of processed manganese source to add to different types of steel, such as stainless steel. ■

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South Africa's automotive industry fears the closure of Volkswagen plant

Volkswagen Group Africa (VWGA) has raised alarms over the potential closure of its Kariega plant in the Eastern Cape, threatening more than 4 000 direct jobs and tens of thousands more across South Africa's automotive value chain.

The possible closure comes as South Africa's automotive sector grapples with uncertain policy support from the government.

Volkswagen's plea for urgent policy action

Volkswagen has long been a cornerstone of South Africa's automotive manufacturing industry, but the company has warned that without urgent policy reforms, its Kariega plant could face closure.

The potential shutdown has sparked widespread concern among lawmakers and industry stakeholders, as the loss of such a critical facility would exacerbate unemployment in a country already struggling with an economic slowdown.

Since 2011, Volkswagen has invested over \$538 million into the Kariega plant, demonstrating a long-term commitment to South Africa's automotive sector. In 2024, the company committed an additional \$210 million to upgrade the facility in preparation for the production of a new SUV model slated for 2027.

Despite these investments, ongoing engagement with the Department of Trade, Industry and Competition (DTIC) has yet to produce meaningful policy reforms.

"Words without action are not leadership – they are negligence," said Martina Biene, Chairwoman of Volkswagen Group Africa. "2026 will be a make-or-break year for Volkswagen in South Africa."

Broader sectoral challenges

Volkswagen's struggles are part of a wider trend affecting South Africa's automotive industry. Earlier this year, Chery acquired Nissan's Rosslyn plant in Pretoria, halting local production of the Navara pickup, which added to the uncertainty in the sector.

"While Chery promised to retain most of the Nissan workforce, the uncertainty over full workforce absorption underscores the sector's instability," said Jordi Vila, president of Nissan Africa.

Labour unions are calling for government intervention, with Irvin Jim, General Secretary of the National Union of Metalworkers of South Africa (Numsa), stating, "We need a decisive and

coordinated state response. We are openly being raided, and there is no sense of urgency."

Rising tariffs, cheap imports from China, and weakening consumer demand continue to compound challenges for local manufacturers.

The NEV Policy Challenge

Volkswagen has also flagged concerns over South Africa's outdated new energy vehicle (NEV) policy, which it says limits the country's competitiveness in the global market.

While VWGA is largely shielded from US tariffs, it faces significant domestic risks, including a shrinking local market, heavy reliance on exports, and insufficient readiness for the global transition to new energy vehicles (NEVs).

"The NEV policy is too narrowly focused on battery electric vehicles that are largely unaffordable locally," Biene said.

She called for a broader approach that includes hybrids and transitional technologies, arguing that this is necessary to help South Africa remain competitive amid Europe's shift to battery electric vehicles (BEVs).

The country's automotive exports are increasingly at risk, with rising EU carbon penalties further hampering South Africa's access to international markets.

A decisive moment for South Africa

The future of the Volkswagen Kariega plant and thousands of jobs now hinges on whether South Africa's policymakers can implement the necessary reforms. With the automotive sector under pressure from global competition, outdated policies, and rising imports, the country's ability to retain foreign investment and preserve its industrial base is at stake.

"It is time to stop the proverbial presses and focus all our attention on this pending disaster," Biene said.

On 31 August 2026, Volkswagen Group Africa will mark 75 years of manufacturing in South Africa. ■



CSIR and Denel sign partnership to advance aerospace and military technologies



The Council for Scientific and Industrial Research (CSIR) and Denel have signed an agreement to advance research, technology development, innovation, knowledge sharing and technology commercialisation in what the CSIR says is a significant milestone to accelerate South Africa's aerospace and military technologies.

"The partnership reinforces the CSIR's mandate to improve competitiveness of industry and support a capable state through science, technology and innovation. It establishes a framework for cooperation across a wide range of research, development and innovation areas," the CSIR said in a statement recently.

CSIR Chief Executive Officer (CEO), Dr Thulani Dlamini, highlighted the extensive scope of the collaboration, which spans areas such as advanced manufacturing, engineering services, sensors, human capital development, maritime, missile technologies, cybersecurity, aeronautics, command, control and situational awareness platforms, space technology and joint technology commercialisation.

"The partnership represents a significant step forward in building a future-ready, innovation-led economy. By combining the CSIR's research capabilities with Denel's expertise, we aim to co-create solutions that not only respond to present challenges but also shape the aerospace and defence technologies of tomorrow. This collaboration will ultimately

contribute towards building a capable state," said Dlamini.

By signing the MoU, the entities aim to establish a formal foundation for joint initiatives that will enhance national competitiveness, attract investment, support the development and commercialisation of locally developed technologies and promote skills development, the CSIR added.

Denel CEO, Tsepo Monaheng said "We are excited that we have this shared vision to collaborate so we can successfully provide solutions to the SANDF (South African National Defence Force) and the broader security cluster to achieve national security. For us, it will always be about how we can best support and advance our country's aerospace and defence industries."

Both entities reaffirmed their commitment to protecting intellectual property rights and ensuring compliance with all relevant legal and regulatory frameworks.

Denel and the CSIR have a long history of working together. The CSIR noted it was the birthplace of the Rooivalk attack helicopter, and played a pivotal role in the development of Denel's suite of missiles. The Council worked with the companies that preceded Denel, such as Kentron, and Atlas Aircraft Corporation – the Rooivalk project began in early 1984 under the auspices of Atlas, a predecessor of Denel Aviation. One of the CSIR's contributions to the Rooivalk includes the development of infrared heat suppressors that were fitted on the exhausts. ■

Shaping concrete designs with Staluform

Company takes delivery of its first fiber laser, a Bodor 12kW, and adds a Durma press brake to its bending department.

Stalufarm is a company specialising in formwork manufacturing that has roots going back to 1979 but was officially named as Staluform in 1998. The company was mainly involved in general engineering work but had slowly been changing its product mix with involvement in formwork and scaffolding, over and above general engineering. The company had a big boost when it won a contract to export product to Europe. At the time they were shipping a container a week but they knew it would not be a long-lasting contract.

“I only joined the company in 2004. Fortunately for me the previous owner was keen to retire and I got the opportunity to purchase the company from him,” said majority shareholder Louis Pieterse.

“The decision to purchase the company was very timely as it was a very busy growth period in South Africa, in general, and not just in the construction industry. We had been awarded the 2010 football World Cup and the various stadiums and infrastructure projects were beginning to be awarded.”

“The company had already moved into manufacturing formwork and scaffolding so we were in a position to capitalise on this boom period. National government put in some R33 billion into preparations for the World Cup, investment that we saw as part of the long-term development plan for the country, rather than funding a once-off event. Hosting the 2010 FIFA World Cup acted as a catalyst for expanding our infrastructure base, skills development, employment creation, and economic growth. The legacy, besides the beautiful stadiums and the Gautrain, was that South Africa was put on the map as a country.”

“However, the South African construction industry was particularly hard hit when the infrastructure development highs leading up to the 2010 FIFA World Cup were followed by a global recession and/or depressed growth. From 2008 the construction industry went very quiet for 10 years. It has only really started to recover in recent years.”

“I give you an example of how tough it was. There were



Last year a Bodor 12kW fiber laser was installed by Spectrum Machine Tools Africa at Staluform

five manufacturing companies during that period that did formwork. Then slowly, they started closing down because there was no work. We had specialised in formwork for all types of civil work where concrete was involved in large quantities. Not your usual bricks and mortar. By that stage we had diversified out of scaffolding because of the number of companies that had started and margins were very tight.”

“Formwork is a temporary, engineered structural system used to shape, support, and mould concrete for railway or highway bridges, including piers, abutments, and decks. These systems must withstand significant vertical and lateral pressure from wet concrete and construction loads.”

“We continued to get the formwork and we also stayed busy with our general engineering work. To survive we had to. At one stage we even made pole bases for Eskom.”

“As you know, with manufacturing concerns, you’ve got big overheads, you need to keep the skills and you have invested in expensive machines. All of this comes at a price and you need to cover these costs.”

“They were tough years and when Covid took the world apart in 2020 it put real pressure on many companies besides all the personal heartache. We had begun plans to expand and moved into our current facility, which is 3 500m², at the beginning of March 2020 – not very good timing.”

“We had to be very creative quickly. One product that did keep us busy was the foot operated soap or sanitising dispenser. It includes a refill bottle with actuator for soap and/or sanitiser, designed to adapt to different bottle sizes.”

“Another product I designed was a walk-through spray tunnel but that was not that successful. I am an industrial engineer that has also learnt to do drafting and drawings – all things civil, structural and mechanical when working with concrete. Still today I get involved on that side of the business.”

“By the time Covid hit there were only two companies manufacturing formwork and the pandemic led to our opposition closing its manufacturing side. Form-Scaff, a leader in the hire



The new Durma AD Servo 40220 hydraulic press brake that has a bending length of 4 020mm and a bending force of 220 tons installed by Spectrum Machine Tools Africa

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Partners Michael van der Merwe, Louis Pieterse and Martin Ludik



Staluform is a company specialising in formwork manufacturing

and sale of scaffolding, formwork, falsework and associated services. They are now our clients and through them we have been able to increase our capacity."

"Since 2023 there has been a recovery in the construction industry and the majority of our work is forming related. They say 2026 could reach pre-World Cup levels, only because government is starting to spend on infrastructure again."

"As I said before, formwork is the essential temporary or permanent mould used in construction to hold wet concrete in place while it sets, ensuring structural components like walls, slabs, and columns take the correct shape and position. It is a critical, high-cost component (30-60% of concrete costs) that requires rigidity, strength, and precise installation to support loads."

"What very few people know is that this formwork is generally custom designed and manufactured and is only used once. Custom-built formwork systems are designed and manufactured specifically to meet a project's individual requirements. Rentable standard parts may also be integrated into the special forms, but at least some of their components should be custom-made and produced separately. Custom-built formwork systems are generally used for concrete structures with complex architectural requirements that cannot be accomplished with only standard formwork systems."

"If you look at bridge



Staluform's product range consists of form systems, column boxes and push-pull props, stadium and staircase formwork, dolos moulds, steel coffers and troughs, culverts, pipes and kerb moulds, bridge formwork, road forms, safety products, material handling and when requested kwikstage scaffolding

ends as an example. There is nothing standard about them except for the material used – concrete. Each one has its specific requirements."

"Therefore, we make to order. So, we've got a job shop environment and are geared towards this type of manufacturing now. In the old factory, which was only 1 000m², everything was geared towards general engineering and fabricating. This has all changed now. If we get a client that says they want to cast concrete we will visit the site, get all the drawings and calculations and then design accordingly."

"We understand how concrete works. The pressure of concrete is 2.5 times more than water. So if you need to pour a high structure, the massive amounts of pressure at the bottom are tremendous. You have to take into account how do you support this, is it strong enough and many other influencing factors. It involves a lot of engineering calculations and making sure everything works because

you don't want your shutter strips being set in concrete."

"One of the more recognisable projects that we have been involved in is the columns at Cape Town International Airport. You will easily recognise them."

"We got some interesting projects on the horizon and our clients are already involved in others. The N3 upgrade between Durban and Pietermaritzburg, KwaZulu-Natal is



Staluform also manufactures chutes for clients

a massive 5 to 8 year, R30 billion plus project (part of SANRAL's N2/N3 programme) designed to widen the highway to 4 to 5 lanes per direction. The project is transforming this vital freight corridor to improve safety and ease congestion, featuring significant engineering works, including new bridges and realigned curves."

"The N2 Wild Coast Project, which is a major South African National Roads Agency (SANRAL) initiative upgrading the 410km stretch between Durban and East London. It features a new greenfield highway, cutting travel distances by about 80km and reducing travel time by up to 3 hours, with key components including the massive Msikaba and Mtentu bridges."

"Our product range consists of form systems, column boxes and push-pull props, stadium and staircase formwork, dolos moulds, steel coffers and troughs, culverts, pipes and kerb moulds, bridge formwork, road forms, safety products, material handling and when requested kwikstage scaffolding."

"Recently we got an order to export formwork for the manufacture of dolos in New Zealand. Dolosse are the most successful concrete structure to protect coastlines from the mighty ocean force and is a South African invention. The oddly shaped concrete structure closely piled in its thousands to arm harbours, ports and shorelines from strong erosive ocean waves. These moulds must be able to accommodate between 20 and 30 tons of concrete."

New equipment: Bodor 12kW fiber laser and Durma press brake

"For a long time now I have been nagged by production manager Martin Ludik and factory manager Michael van der Merwe, who both have purchased shares in the company, to upgrade our bending department and add

fiber laser cutting to the floor. I did the calculations and just with outsourcing our laser cutting for upcoming projects it would cost us R6 million. It definitely made sense to buy a laser and at the same time add a new press brake that has all the modern and productive features."

"Last year a Bodor 12kW fiber laser was installed as well as a Durma AD Servo 40220 hydraulic press brake that has a bending length of 4 020mm and a bending force of 220 tons. Both machines were installed by Spectrum Machine Tools Africa, who have supplied us with most of our equipment."

"Most of our laser material that we cut is between 3mm and 6mm mild steel. The 12kW laser can cut up to 20mm ▶

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The paint department – clients do request their own colours



Staluform has a milling machine in the toolroom department where they custom design and manufacture a number of tools for the formwork that they supply



“We are processing in the region of about 200 tons of material each month. This does not include the 47mm x 5mm flat bar that we import. The bar is generally only used in the forming industry for creating structural type components like braces, support straps, clamps, brackets and custom components but is used in other areas of fabrication.”

mild steel and we are glad we have that capability because we do need it every so often.”

“Besides our pipe bending machines that we use for scaffolding, we already have three Durma press brakes, two guillotines, three croppers/ironworkers, 10 presses, two plate rollers, one section roller and plenty of bandsaws and welding equipment.”

“We also have a CNC milling machine for our toolroom work. We custom design and manufacture a number of tools for the formwork that we supply.”

“We are processing in the region of about 200 tons of material each month. This does not include the 47mm x 5mm flat bar that we import. The bar is generally only used in the forming industry for creating structural type components like braces, support straps, clamps, brackets and custom components but is used in other areas of fabrication.”

“Another component we import is a bolt that has rough edges and is used extensively in the forming industry. It is not made locally. We can import up to 50 000 of them at a time from India.”

“Our product is made in a modular format and is assembled in the factory for testing before being shipped to site.”

“Our staff compliment varies between 65 and 75 depending on our requirements.”

“We have earned the trust and loyalty of our customers over the years by providing a range of goods and services, from large ‘one off’ special products to high volumes of standard formwork and scaffolding.”

“We work with our customers to provide them with the

optimum formwork solution that offers flexibility and cost effectiveness. Our diverse manufacturing capability allows us to offer general steel solutions as well. Our customer base includes all the leading formwork and construction companies locally. We have also supplied formwork to a number of countries in Africa and Europe.”

Contact Staluform on TEL: 012 804 0905 or visit www.staluform.co.za for further details.



Staluform make use of a Nargesa machine for bracket manufacture



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Toyota South Africa Motors: “Driving through disruption”

Toyota South Africa Motors (TSAM) hosted its ninth annual State of the Motor Industry (SOMI) event. The event brought together industry leaders, policymakers, media and mobility stakeholders under the timely theme, “Driving through disruption.” Under the theme, the event focused on navigating global volatility, strengthening industrial competitiveness and accelerating South Africa’s transition to new energy vehicles.

TSAM President and CEO Andrew Kirby opened the event. He expressed gratitude for continued loyalty from customers and industry stakeholders alike. “Our strength as an organisation is built on our suppliers, our dealer network and our interdependent ecosystem. We walk this journey together and we are deeply grateful for the support that continues to move our industry forward,” said Kirby.



Navigating global disruption and local industry performance

Kirby noted that while global and local environments remain highly unpredictable, the industry must adapt faster and more dynamically than ever. “We live in uncertain times – globally and here in South Africa. The question is not whether disruption will come but how we respond to it,” he said. “Driving through disruption requires resilience, curiosity and continuous innovation.”

He emphasised the importance of South Africa’s auto industry to grow its volume adding that however, volume growth needs to go hand in hand with growth in CKD (despite industry growth, CKD has seen a drop). “It is not sufficient to only see volume growth stem from an increase in the entry (affordable) models as this does not have significant GDP impact. We also can’t rely on exports to fill the gap – global regulation and forces will impact where we can export to,” he added.

Kirby reiterated TSAM’s commitment to advancing South Africa’s industrial competitiveness through stable policy, investment in local operations and deeper supply-chain localisation.

Strengthening South Africa’s industrial competitiveness

Kirby highlighted broader industrial challenges – including energy costs, logistics constraints, labour costs and rising input costs – commenting that South Africa is showing early signs of premature deindustrialisation. Manufacturing value-add per capita has declined over the last two decades, falling behind global peers. “We cannot become a purely import-driven market. With the right small policy adjustments, we can strengthen competitiveness, attract new investment and grow the economy,” he said.

Policy clarity for a pragmatic, multi-pathway transition

Kirby welcomed the European Union’s revision of its 2035 target from a 100% to a 90% emissions reduction for new cars/vans, which allows ICE and hybrid vehicles to remain in the mix beyond 2035 if powered by low-carbon fuels or offset through other decarbonisation levers (e.g., e-fuels, biofuels, low-carbon steel). “This pragmatic shift recognises multiple viable pathways to net-zero. However, we cannot rely

on one export destination and assume conditions will stay the same. With incoming UK and EU emissions regulations, our future export volumes are at real risk,” Kirby said.

By contrast, South Africa currently has no NEV target or regulatory framework, though additional investment support for BEVs and FCEVs comes into effect in April. Kirby stressed that countries accelerating NEV adoption are doing so through clear regulatory signals and targeted incentives.

“South Africa must set clear goals and supportive policies aligned to global trends to accelerate NEV adoption in support of our 2050 net-zero commitments,” he urged. “The fastest way to reduce near-term emissions is with HEVs, complemented by PHEVs – which offer practical benefits in our usage conditions – and a growing role for BEVs as charging infrastructure and total cost of ownership improve. Our drivetrain mix will be determined by customer value, infrastructure readiness and use cases.”

During a panel discussion, Professor Justin Barnes, a leading manufacturing and industrialisation expert, unpacked the evolving South African automotive policy environment and the practical interventions required to transition effectively into the NEV era. Barnes highlighted the country’s strengths in manufacturing and export capability but stressed the urgency of infrastructure investment, industry-government collaboration and workforce readiness.

Global economic outlook and its local impact

Renowned economist Goolam Ballim provided a strategic view of global macroeconomic forces affecting South Africa, including commodity cycles, currency movements and global demand shifts. He emphasised that while global headwinds persist, South Africa has significant opportunities to leverage if it aligns economic policy, energy stability and industrial strategy.

A vision for growth

Kirby expressed confidence that with the right policy frameworks and economic environment, South Africa has the potential to grow vehicle sales beyond 700 000 units and lift production beyond 720 000 units. If these are in place, he said that they would unlock an estimated R21 billion in ▶

additional manufacturing value-add and up to 14 500 new direct jobs, with Barnes agreeing that the potential multiplier effect will create a far wider impact.

“We must not simply defend what we have – we must grow. This industry has built deep capabilities over 100 years. With decisive leadership, collaboration and smart

interventions, we can secure the next era of automotive manufacturing in South Africa.”

Kirby concluded by noting the encouraging progress in government–industry engagement through NAAMSA, NAACAM and AITF and called for urgent alignment to support the 2029/2030 investment cycle decisions now underway. ■

Law firm Bowmans warns scrap metal dealers

Firms urged to have plan in place for Competition Commission dawn raids after scrap metal crackdown.

South African companies have been warned to put in place a comprehensive dawn raid response plan, as the Competition Commission appears set to use this enforcement tool more extensively. The warning follows a dawn raid conducted recently on four metal scrap dealers, signalling a renewed focus after such operations became less frequent following the Covid-19 lockdown, a partner at law firm Bowmans has said in a statement in Business Report.

In a note, Heather Irvine said key priorities during a raid include protecting the company’s confidential information and data, and ensuring that the Commission does not gain access to legally privileged material, such as legal opinions provided by the company’s internal and external lawyers.

“This plan should identify a core on-site response team for dealing with a search, including senior management, in-house legal counsel, and the IT and security managers responsible for each site. Ideally, this core team of employees should receive in-depth training to ensure that they understand the crucial role they will play, both during and after the dawn raid. An external support team, including the company’s lawyers and investor relations and communication advisors, should also be identified. Well-prepared teams are essential to avoiding missteps, protecting the company’s rights, and minimising business disruption,” Irvine said.

She advised that, following a search, the companies involved would need to conduct a thorough internal investigation to determine whether any contravention of the Competition Act had occurred.

Depending on the findings, Irvine said it may be possible to qualify for immunity from prosecution in terms of the Commission’s Corporate Leniency Policy. This could relate either to the complaint identified in the search warrant or to other potential contraventions of the Competition Act of which the Commission is not yet aware – for example, involving other time periods, service or product lines, or different prohibited practices.

“Companies that offer substantial cooperation at an early stage after a dawn raid may, in due course, be able to negotiate reduced administrative penalties,” Irvine said.

The warning comes after the Commission recently executed search and seizure operations at the premises of four scrap metal purchasing companies – Scaw South

Africa (Scaw), Cape Gate, Shaurya Steel trading as Force Steels, and Unica Iron and Steel (Unica) – located in Germiston, Nigel, Vanderbijlpark and Hammanskraal.

Meanwhile, the Recycling Association of South Africa (RASA), which said it welcomed the Commission’s decisive action against suspected price-fixing in the industry, has emphasised its call for the immediate suspension of the Price Preference System (PPS).

RASA chairman Geoff Borrajeiro said dismantling any alleged buyer-side cartel would help eliminate artificial barriers to entry, foster fair competition, and create opportunities for small businesses, informal collectors, waste pickers and firms owned by historically disadvantaged persons to participate meaningfully in the market.

“However, we must condemn in the strongest possible terms the alleged conduct of these powerful scrap buyers. This is not mere commercial rivalry – it is outrageous, predatory collusion that has deliberately and systematically suppressed domestic scrap prices for years. It is the economic equivalent of a cartel secretly fixing the price of bread, except that instead of robbing ordinary South Africans of their daily staple, these buyers have been robbing hundreds of thousands of the poorest of the poor – informal metal recyclers and waste pickers – of their only source of income and survival,” Borrajeiro said.

He added that the raids provide fresh and compelling evidence of the market distortions highlighted by the industry association in correspondence with Trade, Industry and Competition Minister Parks Tau. In that correspondence, RASA urged the immediate suspension of the Price Preference System, an independent forensic investigation into its

manipulation since inception, and the removal of the export tax to restore equilibrium.

“While enforcement against anti-competitive conduct is crucial, sustained harm to recyclers, exporters and the broader value chain – including suppressed domestic prices, business sustainability risks, and devastating job losses among the most vulnerable – persists under the current policy framework. The raids reinforce that complementary policy adjustments are urgently needed to level the playing field across the entire scrap metal ecosystem,” Borrajeiro said. ■



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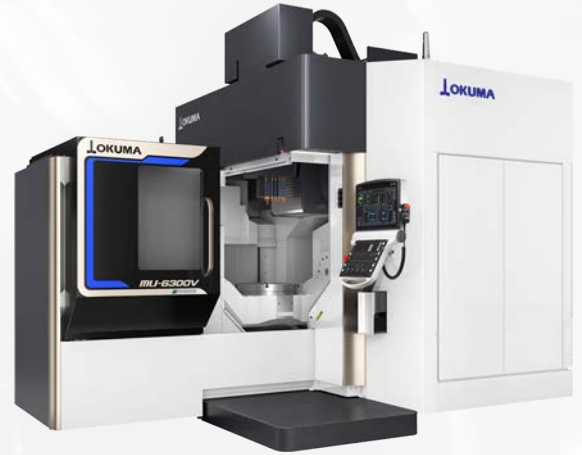
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Aumic Engineering: Rapid design and prototyping leads to manufacturing success



“One thing we have been quite well-known for over the years is our roller engineering. I designed and engineered a fully sealed roller that targets the needs of the cement truck industry. We decided to call our roller the S-2 roller and I redesigned it to have bigger bearings but more importantly to be a fully sealed unit.”

Some people know from an early age that being office bound and wearing a tie and carting a briefcase around is not for them. That was the case for Michael Auret, owner of Aumic Engineering and practical machinist, designer and charismatic shop floor enthusiast. Something Auret also knew though was that he always wanted to work with his hands.

After finishing school, Auret initially studied sports science but he found out early on into that career that it just wasn't bringing him the job satisfaction that he craved. After some time travelling overseas, he returned to South Africa and got a taste of the engineering world when he visited a machine shop owned by a family friend.

It was then that he decided to pair his love of aircraft and

applied himself by enrolling to Ekurhuleni West TVET College's Kempton campus where he studied aircraft maintenance. An opportunity came along during this time for Auret to join an aerospace and military technology conglomerate. An opportunity he wasn't going to miss.

“I was there for about a week before I walked across to the machine shop and saw my first CNC machine. That was when I knew what I wanted to do,” reminisces Auret. “It's interesting because my grandfather was a blue-collar worker and he had worked on lathes his whole life. My dad saw that this life had not been an easy one for my grandfather and so he decided that he was going to be a corporate banker and that is what he did his whole life. I don't think my parents envisioned me ▶

running a machine shop one day but I do know that they are very proud of my achievements now.”

With this background in aviation mechanics maintenance and many friends linked to the aviation industry working in aircraft maintenance and avionics, it's fitting that Auret established his business in Jet Park, Boksburg back in 2008.

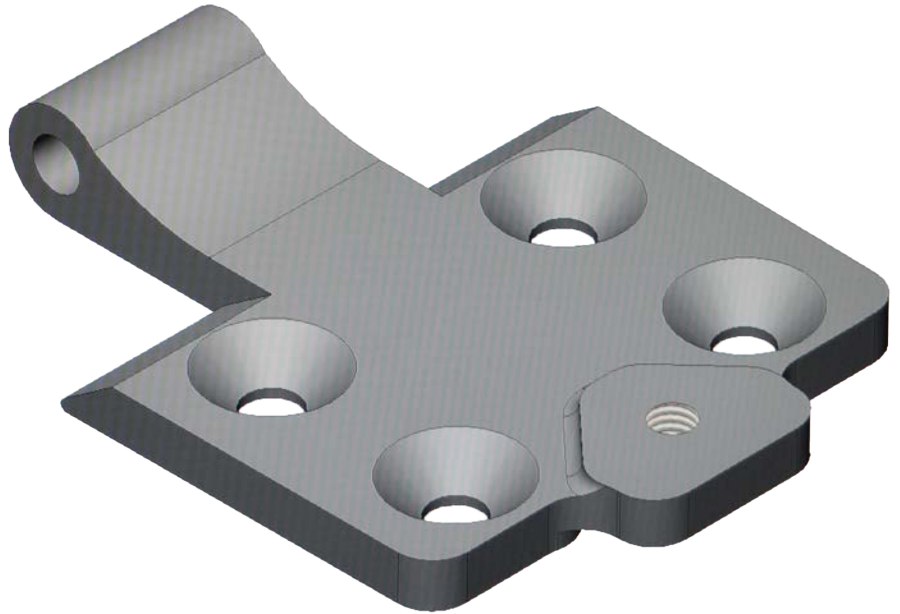
“I wasn't really interested in the repetitive work. And I thought, okay, if I'm going to do my apprenticeship and I want to start my own business one day, that is the direction where I want my business to go. With this industry, you know, it's always chopping and changing and I love it. There's nothing boring, you never get the same product. And if you do repetitive work, there are always projects behind it.”

“After completing my apprenticeship, I got an opportunity with another local engineering business and that's where I really started to come into my own. It didn't take me long to become the foreman of my team and at that stage we were running about nine CNC machines on our shop floor,” said Auret.

“After a few years, another break came when myself and a business partner got to start up a wire cutting business. We started with one machine and ended up running three that basically ran for two years 24 hours a day. It was crazy. We were very busy. Two-o'clock in the morning, every six hours, I was rotating operations. It was hard work, but it was worth it. It gave us a nice cash flow after those first two years.”

“I then decided to buy my business partner out and that's when I started buying our first CNC machines, which is more my passion. I used to run the floor, do the marketing, do the finances and all that kind of stuff by myself, and then, of course, we started growing.”

“I had actually registered the business in 2008 and we were running operations at night while I was still working for one of my previous employers but it was only really in 2010 that we started to get going. I had purchased a second-hand



Reverse engineering and custom design work make up a fair portion of Aumic Engineering's work. Pictured is an armour-rated door hinge designed for your top-end 4x4's and SUV's that Aumic Engineering designed using Fusion

4-axis milling machine and that's how we got going in those early days.”

“Being a machinist, I needed some help with learning how to run and grow my own business so I decided that I needed to invest in a business coach. That coach worked closely with me for the next five years and he taught me so much about being an entrepreneur. I would recommend this process to anyone in business because it really helps you to think outside of the box and look at things through a different lens. With his help and guidance I was able to consistently grow my turnover and my business as a result in those early years.”

“That was until Covid came along. We survived that though and it also taught me to look beyond some of the components that we had been manufacturing and to look for new markets and new customers. Now a sizeable portion of our business is focussed on dust ignition-proof equipment and flameproof components for the mining industry. We hold MASC certification (Mining and Surface Certification) which

means we hold certificates for equipment and components used in areas with explosive atmospheres.”

“We have also been accredited with ISO:9001 and this has opened up business opportunities for us internationally. It was also an eye-opening moment in terms of what it takes to obtain this kind of certification for your business. It also reminded me of my ethics as a business person in that I am never going to cut corners. If something doesn't feel right for me in terms of how contracts are being put in place or similar, I have learned to walk away. I am a guy that operates straight down the line,” says Auret.

“Recently we have also moved away from some other well-known software packages to one that currently suits our needs and operations better – Fusion. I will have had a guy with me for about a year soon on the design side and once he showed me how easy it was to use Fusion it was a no brainer for us. I really like the ▶



Aumic Engineering's Victor Vcenter 102 vertical machining center is equipped with a 4th axis rotary table – the rotary table gives Aumic Engineering an ability to machine complex and intricate components



taping, chamfering, splining, slotting, sawing, polishing, boring, threading, profile milling, 4th axis milling and pressing of bearings. Aumic will also handle all the assembly of components,” explained Auret.

“We work with a range of materials from your stainless steels to titanium, aluminium as well as various polymers too,” says Auret.

“One thing we have been quite well-known for over the years is our roller engineering. It is not as much a part of our business as it was a number of years ago, but I basically designed and engineered a fully sealed roller that targets the needs of the cement truck industry. What had been available at the time in terms of rollers

were just inferior in respect of their design quality for their specific application.”

“We decided to call our roller the S-2 roller and I redesigned it to have bigger bearings but more importantly to be a fully sealed unit. With it being a fully sealed unit, that ensured that no cement dust would enter the unit causing premature wear from abrasions inside the bearings. Although these rollers are primarily wear components, I wanted to redesign them in such a way that they would last for more than a few months before ▶

Aumic Engineering purchased a Hurco VM20i vertical machining center to help with a specific order. The Hurco VM20i is a 3-axis vertical machining center with X, Y and Z travels of 1 016mm x 508mm x 508mm, a 12 000rpm spindle and a 24 tool automatic tool changer. It was supplied by TH Machine Tools. Aumic Engineering also have a smaller version of that machine – a Hurco VM10i. It’s a compact 3-axis vertical machining center designed for efficiency with a 1.8m² footprint

3D rendering it offers us for some of the components we are engineering like the armour-rated door hinges for your top-end 4x4’s and SUV’s, and of course, you can’t beat its affordability.”

“An area we have focussed on and built a bit of a reputation in is reverse engineering. If a customer has a problem with a component – say it’s not the correct sizing or he just wants a better designed component, that’s when we will step in. We will do the necessary in terms of scanning and redesigning and redrawing the component where needed and then we will manufacture a sample for them. From there we take things to full scale production. These components can range from hinges to massive hydraulic cylinders. It’s obviously not as simple as that though and a lot goes into the process such as calculating material strengths and taking into account what sort of other components the new component must work together with. But this is where we work closely with the customer to make sure that the end component is exactly to their needs – precision engineered.”

“Simply though, Aumic Engineering offers a full turnkey precision engineering service. We have full CNC capabilities that includes CNC turning, CNC milling, drilling,



Aumic Engineering hold MASC certification (Mining and Surface Certification) which means that they hold certificates for equipment and components used in areas with explosive atmospheres

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they needed replacing. We are now able to offer a full range of different sized rollers and some of our rollers are still operating in the field some four to five years later.”

Another speciality component that Aumic Engineering manufactures for the mining sector are various end nuts. These are safety critical components that have to be designed and engineered to certain lengths and threads and from high tensile materials. These components also need to adhere to very specific safety requirements that ensure that



A sizeable portion of Aumic Engineering’s business is focussed on dust ignition-proof equipment and flameproof components for the mining industry for which Aumic holds MASC certification



Aumic Engineering manufacture a range of different precision engineered components



Anodised aluminium components ready for delivery

the units that they get fastened to are flameproof.

“We have never stuck to one brand of tooling and have always experimented with what is out there. To give you an idea, we were machining one bracket and it would take – just the roughing cycles – 27 minutes. A new tool arrived two weeks ago for us to test out and we got the process down to 14 and a half minutes. This next order we will run will be for that component is going to be for over 500 units so that’s a lot of time saved. Tooling is the mathematics of your business as I like to call it.”

“We have worked on some really interesting projects over the years. As I mentioned, the cement roller project was really good for us and we got a lot of traction out of that project. We have recently actually been in discussions with an old contact of mine and who knows, there might be further scope for that project in the future.”

“Another interesting project that we were able to redesign, prototype and bring to the manufacturing stage was for a component called an armature that forms part of a slurry pump. The company had been getting this component manufactured where it had fins that ran down part of the side of the component and at 8 000rpm when these components were turning in the pump – helping to remove sludge – they would just break off.”

“So we redesigned the component and machined it as a whole component out of solid billet using our Victor Vcenter 102 vertical machining center with its 4th axis rotary table after the component had been through the lathe for initial material removal and they are extremely happy with how it changed their operations. Previously the fins that you see now fully machined as one part of the one component had been separately machined and welded onto the core part of the component. Our component is made out of 304L stainless steel so it offers excellent corrosion resistance and part of the redesign from our side actually involved changing the angle that the fins faced. Previously they were in a straight line whereas we have redesigned them to be at an angle meaning overall the component functions a lot better than it did previously.”

“Our Victor Vcenter 102 VMC has X, Y and Z travels of 1 020mm x 520mm x 560mm and a table size of 1 100mm x 510mm. Its rotary table though really gives us that ability to machine complex and intricate components.”

“One of our best success stories though has to be a polycarbonate casing that houses digital displays and that could be mounted onto the dashboard of earth moving equipment. We went through a few design revisions with the customer and eventually settled on one that was IP63 rated and that the customer loved. He ended up placing such a good order with us that we ended up purchasing our Hurco VM20i vertical machining center just to help with that specific order. The Hurco VM20i is a 3-axis vertical machining center with X, Y and Z travels of 1 016mm x 508mm x 508mm, a 12 000rpm spindle and a 24 tool automatic tool changer. It was supplied by TH Machine Tools.”

“We also have a smaller version of that machine – our Hurco VM10i. It is a compact 3-axis vertical machining center designed for efficiency with a 1.8m² footprint. It has X, Y and Z travels of 660mm x 406mm x 508mm, a 10 000rpm spindle and a ▶

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“Another interesting project that we were able to redesign, prototype and bring to the manufacturing stage was for a component called an armature that forms part of a slurry pump. The company had been getting this component manufactured where it had fins that ran down part of the side of the component and at 8 000rpm when these components were turning in the pump – helping to remove sludge – they would just break off. So we redesigned the component and machined it as a whole component out of solid billet.”

24 tool automatic tool changer. Both machines feature BT-40 tooling.”

“Aumic Engineering currently have five CNC machines on the shop floor that include three mills and two lathes.”

Currently Aumic Engineering employ 10 people and one philosophy Auret said has helped immensely with staff retention and staff investment in the business over the years has been to include them wherever possible in the business. It creates a sense of camaraderie and creates a culture where employees enjoy their job and what they do. “When there is training, we all go together. You



“An area we have focussed on and built a bit of a reputation in is reverse engineering. If a customer has a problem with a component – say it’s not the correct sizing or he just wants a better designed component, that’s when we will step in.”



Some of Aumic Engineering’s staff. From left to right, Sean Delpert, Johann Albasini, Sharmaine Mari, and owner Michael Auret

just see immediate benefits when it comes to efficiency and quality of components being manufactured, and when the staff know that their work might go on display on social media or elsewhere you just see a sense of pride,” concluded Auret.

Contact Aumic Engineering on TEL: +27 72 441 3366 or visit <https://www.aumic.co.za> for further details. ■



Aumic Engineering’s shop floor is compact but efficient allowing component production to flow seamlessly



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Malvern Engineering Works: A legacy of more than 75 years of mineral processing equipment production



Malvern Engineering's Heavy Media Drum is a cutting-edge solution designed for efficient and precise separation in mineral processing applications. The drums are customised for diameter, shell thickness and liner materials to suit specific plant conditions and are available in diameters ranging from 1.8m to 4.2m and lengths from 1.8m to 5.4m. Image courtesy of Malvern Engineering

Malvern Engineering Works entered the South African engineering landscape in June 1947 as a small general workshop focused on servicing the mining industry from a base in Germiston, Gauteng. Over the subsequent decades the business expanded its product range from simple fabricated and refurbished components to specialised mineral processing equipment.

The family-owned company was started by Samuel Wilson, before his son Brian Wilson took over the running of the company. His sons, Craig and Peter Wilson, then joined the business and Peter Wilson still serves as the CEO while Craig took up an opportunity with one of Malvern Engineering's Licensors and is now based in Brisbane, Australia.

Malvern Engineering Works now delivers a portfolio of magnetic separators, heavy media drums, centrifuges, suspended magnets, demagnetising coils, sampling equipment and bespoke process machinery along with associated services including field maintenance, laboratory trials and component refurbishment.

Malvern's facilities cover more than 6 500m² of workshop floor space at their Germiston facility with a secondary branch in eMalaheni, Mpumalanga, that is used for maintenance on some of its process equipment. These sites house fabrication,

assembly, testing and repair operations capable of producing more than 95% of the components used in the company's equipment range. In-house design and product development, led by a strong team skilled in CAD-CAM and magnetic field modelling, are integral to this continuous product development.

Technical design capability was introduced in the early 1980's when Malvern transitioned from general engineering, to engineering and manufacturing its own range of equipment. Since then, Malvern Engineering's footprint has broadened through agency and licence agreements, including a long-standing relationship with Ludowici (later acquired by FLSmidth now known as FLS) for centrifuge technology. The firm has also established international alliances and owns or participates in several group companies to extend its manufacturing capabilities, testing and market reach, including units in Mexico, Mozambique and India.

ISO 9001 quality systems are maintained across operations, and Malvern upholds compliance with formal quality standards as part of its production assurance it offers its customers. Its personnel include mechanical and process engineers, metallurgists, welders and machinists. The company also promotes structured safety and environmental practices as part of its operating procedures. ▶

Magnetic separation technology

"Magnetic separators remain a core aspect of Malvern's product range," says Greg Morley-Jepson, Malvern Engineering's Managing Director. These magnetic separators are deployed mainly across the mineral beneficiation, coal preparation and material handling industries for extraction of magnetic elements, tramp iron removal, and purification steps in processing streams. "When we started off in this area years ago it was mainly just on a small fabrication basis but we are now seen as a major player in this area and we hold a dominant position in Southern Africa for these products," continued Morley-Jepson.

He explains that over the years the company has invested heavily into research and development in this area. "We make use of the top of the range software to create models so that we can better understand what might happen in certain environments. We can then take these results and replicate them in our workshop. As a group company, Malvern Engineering has also always had a very adaptable business model in terms of the industries that we serve. As an example, some industries are cyclical in their nature and you will see a boom in orders when large capital investments take place. So you need to plan accordingly and we have built in various service agreements over the years to accommodate for these occurrences, and that has been part of the success of this business," explains Morley-Jepson.

"We will receive a lot of our material in kit form but then we carry out all the necessary fabrication work on that material in-house. We have all the facilities to sand blast, weld, paint and passivate before final assembly and test runs are conducted."

"I can say with confidence that in my time of working here we have never had to retrench one person working here and that is testament to the type of business model that we run here. We also have a lot of long-serving people here and that really is something to be proud of."

Malvern Engineering's magnetic separators are supplied in low, medium and high intensity configurations with materials selected based on environment and process demands – typically 304 and 316 stainless steels for wet and corrosive conditions. Malvern is however proficient in fabricating with mild steel and other materials too.

Wet drum magnetic separators

Wet drum magnetic separators are designed to separate magnetic particles from liquid suspensions. Two main configurations exist in Malvern's offering: low intensity units using ceramic magnetic circuits and medium intensity units employing rare earth elements. These separators handle dense media circuits, magnetite recovery and scavenging of magnetic ores. Tanks can be arranged in counter-rotation, concurrent or counter-current flow patterns to suit varying slurry characteristics and applications. The design includes flow distribution mechanisms, underflow control devices, adjustable scraper assemblies, water repulp and purge to optimise separation performance and throughput. Malvern can fabricate magnetic drums with diameters to suit industry norms with drum lengths up to 3.66m wide but do also fabricate customer specific options to align with bespoke plant feed capacities and layout.

These units serve heavy media separation, dense media cyclone circuits and recovery systems. They operate on the principle that magnetic particles attach to the rotating drum surface as slurry passes across the magnetic field, then discharge separately from non-magnetic particles. Specifications such as pole configuration, gap height and tank style are matched to feed characteristics such as density, particle size and desired recovery rates. ▶



Malvern Engineering's dry drum magnetic separator provides a cutting-edge solution for the efficient separation of magnetic and non-magnetic materials in dry processing applications. Image courtesy of Malvern Engineering



Malvern Engineering's wet drum magnetic separators are high-efficiency magnetic separation systems that ensure effective recovery of magnetic materials from slurries. Image courtesy of Malvern Engineering



Sampling systems form another technical segment of Malvern Engineering's fabrication abilities. They fabricate cross belt samplers, rotary sample dividers and variable split sample dividers. Image courtesy of Malvern Engineering

Dry drum and magnetic roll separators

Dry drum magnetic roll separators remove magnetic materials from weakly or non-magnetic bulk feeds in dry applications. Typical applications span silica, quartz, ilmenite and garnet separation as well as contamination removal in ceramics, chemicals and heavy mineral sands processing. Designs utilise ferrite magnets for low intensity scalping and rare earth neodymium-iron-boron (NdFeB) magnets for medium to high intensity separation.

Roll diameters range from around 100mm to 300mm with roll widths up to 1.5m or more depending on configuration and feed requirements. Roll intensity ranges from approximately 2 000G for ferrite circuits up to 11 000 – 13 000G for rare earth circuits. Customised feed systems and drives are provided to deliver consistent material distribution across both drum or rolls. Construction materials include stainless steel and mild steel housings with all material contact surfaces supplied in stainless steel, PTFE-coated belts, and dust-free enclosures where required for sensitive industries.

Suspended magnets and tramp metal removal

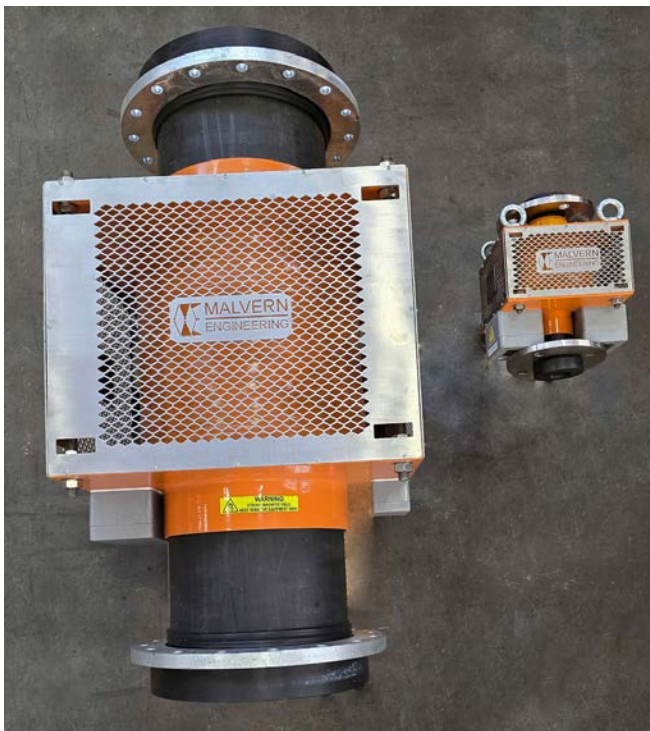
To protect plant equipment and improve product quality, Malvern Engineering supplies suspended magnetic separators. These suspended electromagnets and permanent magnets operate above conveyor belts or within chutes to capture tramp ferrous metal. DC-powered, oil-cooled coils generate a magnetic field that lifts and holds metal pieces as



Malvern Engineering's Suspended Permanent and Electromagnetic Separator provides a reliable solution for separating ferrous contaminants from non-magnetic materials in various industrial processes. Image courtesy of Malvern Engineering



Malvern Engineering manufactures fine and coarse coal centrifuges suited for dewatering coal. These machines subject slurry feeds to rapid centrifugal forces to separate solids from liquids. Image courtesy of Malvern Engineering



Malvern Engineering's Demagnetising Coils are precision-engineered solutions for eliminating residual magnetism in ferrous and non-ferrous materials. By utilising electromagnetic technology, these coils restore materials to their natural state, improving downstream processing and reducing wear on equipment. Image courtesy of Malvern Engineering

bulk material flows beneath. "The purpose of the magnet is to protect downstream equipment, by the extraction of rogue steel components such as liner plates, picks, roof bolts, hand tools, etc. which can enter the process plant and cause damage to equipment." Maintenance provisions, self-cleaning configurations and capacity matched to conveyor widths are part of the design considerations.

Centrifuge systems

Under licence with FLS, Malvern manufactures, services and repairs centrifuges suited for dewatering coal. These machines subject slurry feeds to rapid centrifugal and vibrating forces to separate solids from liquids. Both coarse and fine coal applications are catered to, with machine selection based on particle size distribution, feed solids content and target moisture levels. Centrifuges are engineered with rotary wedge wire baskets, conveyor scrolls, seals and bearings, with material selection to withstand abrasive slurries. After-sales support includes spares, installation assistance and maintenance guidance.

Malvern's centrifuge business is another core aspect of their business where the company has established themselves as a significant player and seen them realise a lot of success in terms of market reach over the years explains Morley-Jepson. ▶

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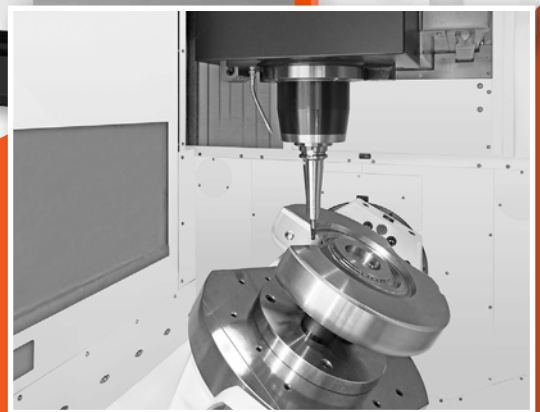
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Malvern Engineering established a subsidiary business, Wedge Wire Industries in 2005. The business was setup to manufacture Malvern Engineering's centrifuge baskets but has subsequently expanded to manufacture sieve bends, NKM screens, flat panel screens and water well screens, ranging across a variety of industries from mining to construction and water treatment.



Wedge Wire Industries was established in 2005. Having started off exclusively manufacturing centrifuge baskets for Malvern Engineering, the company has expanded its product range to include sieve bends, NKM screens, flat panel screens and water well screens, ranging across a variety of industries from mining to construction and water treatment. Image courtesy of Malvern Engineering

Heavy media drum separators

Heavy media drums are used where density-based separation is required. In coal and mineral beneficiation circuits, dense media such as ferrosilicon or magnetite suspensions provide a medium where light material floats and heavy material sinks. Drum separators continuously recover magnetic media from slurry which is returned for reuse in the dense media system. Malvern Engineering's locally fabricated drums are customised for diameter, shell thickness and liner materials to suit specific plant conditions and are available in diameters ranging from 1.8m to 4.2m and lengths from 1.8m to 5.4m.

The product line for heavy media includes units applied in coal, iron ore, chromite, and manganese operations to name a few. Engineering input includes drum design, media containment, magnetic circuitry and interface with dense media cyclone circuits. Morley-Jepson says that over the years, Malvern-Engineering has developed unique in-house methods and fabrication secrets when it comes to manufacturing these drums.

Demagnetising and sampling equipment

Following magnetic separation, residual magnetism in recovered media or products can interfere with downstream processing.

Malvern Engineering supplies demagnetising coils in a range of sizes and electrical configurations for this purpose. These coils produce alternating magnetic fields to remove residual magnetisation from ferrous and non-ferrous materials restoring materials to their natural



A view of Malvern Engineering's fabrication facility. Image courtesy of Malvern Engineering

state before subsequent beneficiation stages.

Sampling systems form another technical segment of Malvern Engineering's fabrication abilities. Cross-belt samplers, rotary sample dividers and variable split dividers are engineered to extract representative material for quality control. These devices are fabricated with wear-resistant materials and precision components to provide consistent sample sizes across production streams. Cross-belt samplers can be fabricated to accommodate a 1 500mm wide conveyor belt.

Laboratory testing and pilot trials

Malvern Engineering maintains a dedicated laboratory testing facility at its Germiston head office. The facility is equipped with pilot-scale magnetic separation machines (wet and dry) including rare earth roll and drum separators. Clients can supply material samples for feasibility trials and process

optimisation studies. Laboratory tests establish performance metrics such as recovery efficiency, throughput and magnetic field interactions under controlled conditions. These data informs full-scale equipment selection and tuning before site installation.

For situations where larger pilot units are required, Malvern Engineering conducts field trials by diverting a portion of plant feed through mobile pilot equipment. This allows real-time evaluation on client sites with measurable results that scale to commercial installations, all handled by Malvern Engineering's team of technical specialists.

Services: maintenance, repair and retrofits

Field service teams provide scheduled maintenance and corrective repairs either under comprehensive annual maintenance contracts or on an ad-hoc basis. Teams are

trained to handle both Malvern-branded machines and equipment from other manufacturers. Detailed plant audits identify mechanical or process bottlenecks and provide corrective strategies, while onsite fabrication capability supports replacement component manufacturing. ▶

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Sector footprint and material handling impact

Malvern Engineering's products serve a broad range



Fabrication takes place in meticulous order from raw material to finished components – with shot blasting and painting all taking place at Malvern Engineering's warehouse. Pictured is a Faccin 3-plate roller used for fabrication of rolled components



Components at various stages of fabrication wait to move further along the assembly line



All of Malvern Engineering's components are assembled and tested on site at their fabrication facility before being freighted to customers

of sectors besides mining – from bulk materials handling to chemical and mineral processing as well as the food processing and recycling industries. Magnetic separators protect crushers, conveyors and screens from tramp metal while improving product quality. Sampling systems integrate with quality assurance processes, and heavy media drums link with density separation circuits in beneficiation plants.

From its early history as a general workshop to its current status as a diversified engineering provider, Malvern Engineering Works has built its reputation supported by technical capability, in-house fabrication and process understanding. The company's continued investment in design tools, laboratory testing and service infrastructure reflects its role in supporting mineral and material processing operations throughout Southern Africa and beyond.

"Peter and I have spent many hours travelling the world building this business. We'll never take it out of South Africa but we certainly want to keep building our export markets and to do this you need to see the people that matter and be a presence on the ground in those regions. I can't tell you how important it is to do this. Over and above this, you have to convey an image that reflects in the products and components that you manufacture, and that's something that Malvern Engineering has been known for. You also can't do this alone and we have worked hard at building a strong and loyal team to help us keep taking this business forward," concludes Morley-Jepson.

Malvern Engineering employs approximately 150 people between its Germiston and eMalahleni facilities, and as a group company, approximately 800 people. Malvern Engineering maintain a presence in South Africa, Mozambique, Australia, India and Mexico.

For further information contact Malvern Engineering on TEL: +2711 873 9010 or visit <https://www.malvern.co.za>



Fabrication takes place in Malvern Engineering's more than 6 500m² warehouse at their Germiston facility with a secondary branch in eMalahleni, Mpumalanga, that is used for maintenance on some of its fabricated products



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Power skiving with Taegutec: An innovative gear machining option



It is expected that the machining of automobile transmission gears will continue into the future with 7-speed and 8-speed transmissions, even with the introduction of EV reducers. The core component of these gears and reducers is the planetary gear set, with the power skiving being an innovative method for machining ring gears

It is expected that the machining of automobile transmission gears will continue into the future with 7-speed and 8-speed transmissions, even with the introduction of EV reducers. The core component of these gears and reducers is the planetary gear set, with the power skiving being an innovative method for machining ring gears.

Power skiving was conceived in the beginning of the 20th century. Though highly productive and flexible, this method was difficult to implement because it required precision equipment and tools. Today, however, the development of new geometries and grades of tools, as well as improved machine control, makes the power skiving process an interesting alternative for gear manufacturing.

Power skiving is basically an operation where a workpiece is machined into the shape of a desired gear. The two axes rotate according to the gear ratio due to the intersecting angle

between the gear axis and the tool axis, resulting in skiving cutting in the direction of the gear's tooth line, and continuous skiving cutting occurs with a combination of hobbing and shaping.

Advantages of power skiving machining method

Power skiving replaces most of the conventional gear machining methods. Such methods include broaching, shaping, and hobbing which are used depending on internal/external gear machining and interference issues. Power skiving is more flexible than broaching because it can be applied to blind and through hole gears. Hobbing can only be applied to external gear processing but cannot be applied if there is interference, whereas power skiving can also be applied when there is interference with internal/external tooth processing. In shaping, compared to power skiving, the tool ▶

has a longer contact time with the workpiece and generates much cutting heat, which is disadvantageous to tool life. Another advantage to power skiving is its excellent profile accuracy in the lead direction.

High productivity: In the power skiving process, the cutting speed is in the tooth line direction of the gear, so the milling rotation speed of the cutter must be multiplied by $\sin\Sigma$ (intersection angle). Although there is a difference, depending on the angle of intersection, the revolutions per minute (RPM) of the spindle must be about four times faster than that of conventional milling in order to obtain the desired speed with a carbide tool.

At this time, the workpiece rotates according to the gear ratio, and since continuous cutting is performed according to the way the gear is generated, the cutting speed becomes very fast.

Power skiving differs depending on conditions such as the module and pressure angle, but it is generally 4 times faster than hobbing and about 10 times faster than shaping. Therefore, it is possible to significantly reduce the number of machines used in the machining process. For example, one power skiving machine can do the work of 10 installed shaper machines. This is the basis for reducing space, minimising equipment investment, and reducing manpower costs.

One machine for turning, milling, and gear machining: Traditional gear machining requires separate machines for each process; for example, shaping is usually done on the shaping machine and hobbing is done only on the hobbing machine. However, in the case of power skiving, all the work is done on one 5-axis multitasking machine, making it possible for the operator to complete turning, grooving, milling, drilling and chisel machining, all in one setting. This eliminates the need for separate setup time and can dramatically shorten the cycle time.

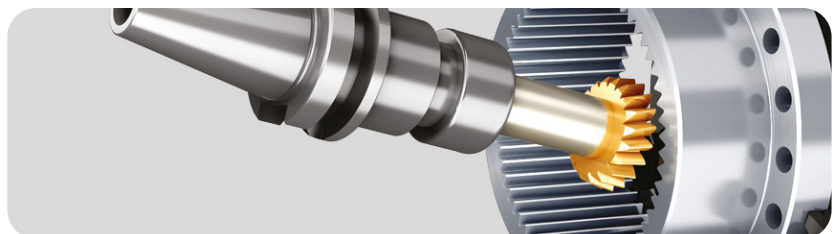
High compatibility: With the same module and pressure angle tool, power skiving processes of spur gears and helical gears are machined within the range of formed crossing angles in the production of internal and external gear teeth. In addition, it is also able to machine the various numbers of teeth.

Less interference when machining: Hobbing can only be applied to external teeth and cannot be applied when there is workpiece interference, but power skiving can reduce the component size and weight when machining gear parts. Gear tooth profiling using shaping has relatively even less interference than hobbing, but the productivity is low and undercutting is essential when machining blind hole types. However, power skiving avoids this issue with a programmed tool path even if there is no undercutting required.

Hard power skiving for internal gears: After gear cutting, partial deformation occurs when heat treatment is performed to increase the hardness of the gear surface. Hard power skiving refers to finishing the deformed part with a carbide power skiving tool. Previously, there was no way to efficiently process heat-treated small and medium-sized internal gears, therefore, power skiving will become a game changer in gear cutting in the future.



Power skiving replaces most of the conventional gear machining methods. Such methods include broaching, shaping, and hobbing which are used depending on internal/external gear machining and interference issues



Power skiving is more flexible than broaching because it can be applied to blind and through hole gears

TaeguTec's power skiving tool technology

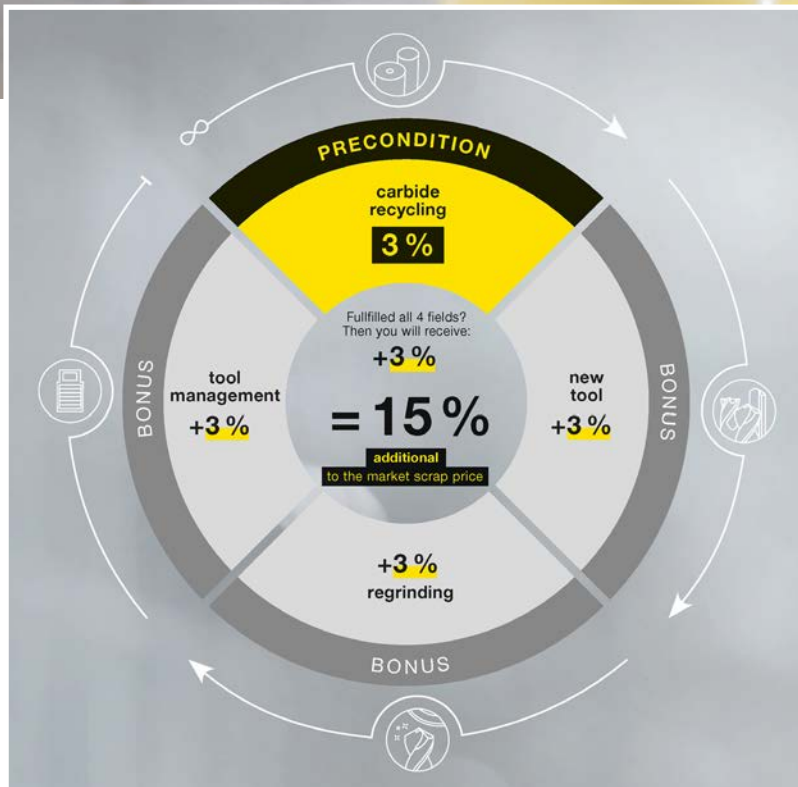
TaeguTec is one of the leaders and innovators of advanced metal cutting tools including insert types and head changeable solid carbide tools with advanced technology in the production of power skiving tools.

Essentially, carbide tools have very high cutting speeds and high hardness compared to HSS tools. This reduces machining time and increases tool life. The insert type is applied to gears in large sizes with the diameter of the tool being relatively large. In addition, the head changeable solid carbide tool is suitable for the gear processing of small sizes such as automobile parts.

Usually, there is a high probability of problems such as chip tangling due to the rotation of the workpiece during internal gear processing, but TaeguTec's cutting tools solve these challenges using an internal coolant supply. The head changeable type solid carbide tools not only guarantee high-precision because of its rigid and precise fastening structure, but also eliminates the need for setup intervals due to simple indexable head replacement, which enables high cost reduction.

Contact TaeguTec SA on TEL: 011 362 1500 or visit www.taegutec.com for more information.

The Gühring Tool Circle: Earn money with carbide recycling



When a cutting tool loses its cutting properties, that's not the end – it's just the beginning with the Gühring Tool Circle: Earn money with carbide recycling

When a cutting tool loses its cutting properties, that's not the end – it's just the beginning: Gühring purchases worn tools and other carbide scrap, feeds it into the recycling process and extracts valuable secondary raw materials from it, which are used to manufacture new, high-performance tools. Thanks to the bonus model, customers benefit from the Gühring Tool Circle in several ways.

The Gühring Tool Circle enables companies to recycle their carbide scrap in an uncomplicated manner. Customers order a collection container, which is provided free of charge and picked up again once it is full. The weight, contents and credit note are then documented in a transparent and traceable manner. Gühring takes care of the entire recycling logistics, so customers don't have to worry about a thing – and because everything from carbide production to recycling takes place in Germany, they also benefit from guaranteed supply chains. ▶

With the Gühring bonus model, customers receive up to 15% on top of the market scrap price

Example: **50 kg** x **€ 20** + **15%** = **1,150 €**

Carbide scrap
Quantity

Market price
per kilo

Bonus realised
Total

Credit note
on new tool

Full participation in all four areas results in an additional bonus, which increases the total credit to up to 15%

65% CO2 savings thanks to carbide recycling

Sustainability without compromise. Thanks to its own carbide technology and recycling facilities, Gühring is able to recover and recycle almost 100 per cent of its raw materials. This has several advantages: Natural resources such as tungsten and cobalt are conserved and used sustainably through recycling. Furthermore, compared to carbide production using primary raw materials, 65% CO2 is saved because the recycling process significantly reduces energy consumption and emissions. It makes no difference for new tools whether the raw materials are freshly extracted or recycled. The new tools are of the same quality.

Customer loyalty is rewarded: The Gühring bonus model

In addition to reducing their own ecological footprint and benefiting from uncomplicated recycling logistics, customers also benefit from the Gühring Tool Circle: Gühring offers a fair repurchase price based on the current carbide market price,

which can be conveniently calculated using the online scrap calculator.

But that's not all. With the Gühring bonus model, customers receive up to 15% on top of the market scrap price, which is issued as a credit note for the purchase of new tools. The amount of the credit note increases with the use of services from a total of four sub-areas: There is already a 3% bonus for pure carbide recycling. Customers who also purchase new tools, have tools reground or use Gühring tool management receive an additional 3%. Full participation in all four areas results in an additional bonus, which increases the total credit to up to 15%. Those who map their entire tool cycle with Gühring not only save money, but also reduce supplier diversity by placing their trust in a single manufacturer and ensure consistent quality made in Germany.

For further details contact Gühring South Africa on TEL: 041 372 2047/46/43/38 or visit www.guhring.co.za



Gühring purchases worn tools and other carbide scrap, feeds it into the recycling process and extracts valuable secondary raw materials from it, which are used to manufacture new, high-performance tools

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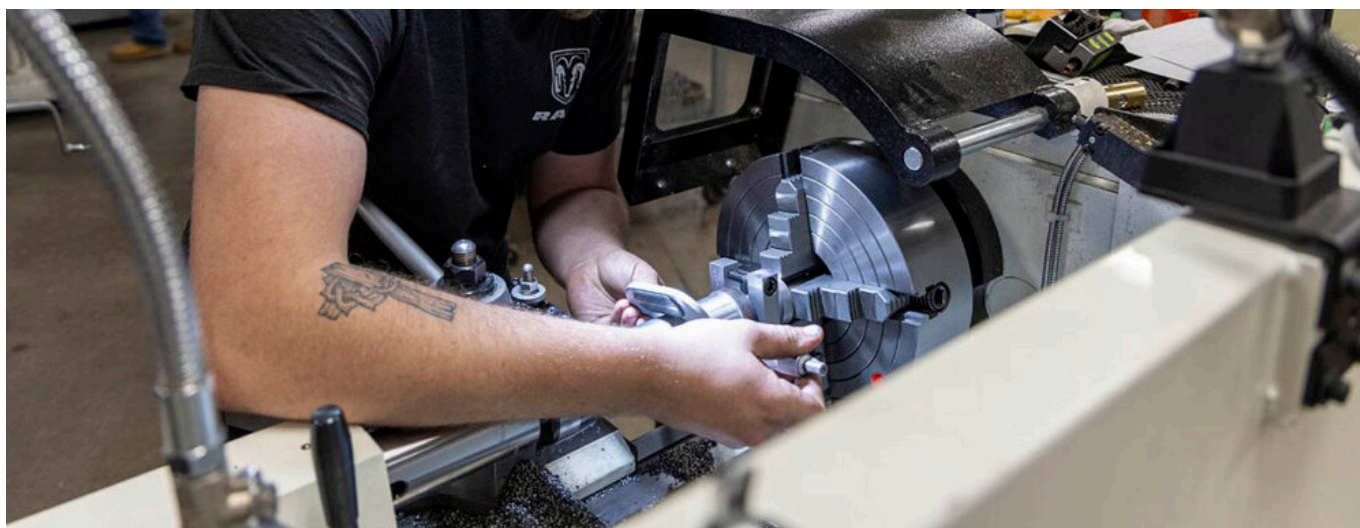
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Kennametal launches Machinist of the Year global programme to honour long-time customers and industry leaders



Kennametal has announced the launch of its Machinist of the Year programme, a new annual initiative designed to recognise the skill, dedication and innovation of long-time machinist customers across every region. Winners will be announced in the Americas, EMEA, APAC and India.

“Machinists are the backbone of manufacturing,” said Eddie McBarnett, Kennametal's Vice President of Marketing & Strategy. “Kennametal's innovations have always been driven by the needs of these skilled professionals with tooling solutions that cut faster, last longer and help shops achieve greater precision and profitability.”

The Machinist of the Year programme celebrates this enduring partnership by celebrating machinists who embody craftsmanship and innovation. Teams in the Americas, EMEA, APAC and India will each recognise a machinist who showcases the very best of their region's machining excellence.

“Our global search for Machinists of the Year is more than a contest – it's a celebration of the partnerships and expertise that drive our industry forward,” said Scott Etling, Vice President of Product Marketing Management.

To enter, participants should post a brief, compelling video on their own social media channels, sharing how they use Kennametal products and why they should be selected as Machinist of the Year. Entrants must tag Kennametal, include the hashtag #KMTMachinist and have been actively using Kennametal products at their workshop for at least the past year. Finalists will be selected regionally by the company's marketing teams in each region, and final voting will be open to the public on Kennametal's social media channels.

Each regional winner will feature on Kennametal's website, blog and social media channels, will receive \$7 500 (USD equivalent) in branded Machinist of the Year Toolbox and Kennametal tooling, an invitation to lead live machining demonstrations at a global trade show (IMTS, AMB, JIMTOF, IMTEX/AMTEX, as applicable) and an automatic designation as a Kennametal Brand Ambassador.

For full details, submission guidelines and voting information, visit Kennametal's Machinist of the Year page at <https://www.kennametal.com/bd/en/machinist-of-the-year.html> ■



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How Airbus is pioneering aircraft manufacturing with Titanium 3D printing

Additive manufacturing with titanium wire is becoming a reality.

Picture an aircraft industry where the toughest structural components of an airliner – parts that handle stress and fatigue – are grown from a spool of wire, rather than being carved out of blocks of metal as is the norm today. In fact, that's starting to become a reality in Airbus' factories as they prepare for the future.

The technology in question is a 3D printing technique called wire-Directed Energy Deposition (w-DED). This uses a new additive manufacturing approach with titanium to create structural aircraft parts with less resulting material waste, compared with the traditional subtractive methods such as machining from plate or forging.

How does w-DED work?

The technique uses a multi-axis robotic arm, armed with a spool of titanium wire, moving with digital precision. Energy, in the form of a laser, plasma, or electron beam is focused onto the wire, instantly melting it and fusing it layer-by-layer onto a surface. Superficially similar to welding, but with a 3D model as its guide, it prints the object from the 'ground up' into what is known as a 'blank'. This blank looks very much like the final required shape, i.e. 'near net shaped', which subsequently undergoes a quick machining to conform to the exact dimensions of the part design.

w-DED: Unlocking 3D printing for large parts

While 3D printing with metals in aerospace has been used for around a decade, up until now it has mostly been used for smaller components. These conventional systems, called 'powder-bed'

printers, were typically optimised for making parts that are less than two feet long.

w-DED, on the other hand, allows Airbus to move from printing small components to creating large, structural titanium parts up to seven metres (over 23 feet) long. The new process promises to be faster than powder-bed 3D printing, boosting production from hundreds of grams per hour to several kilograms per hour. This leap could make 3D printing viable for industrial, high-volume manufacturing of large structural components for commercial aircraft.

Helping to reduce titanium raw material waste

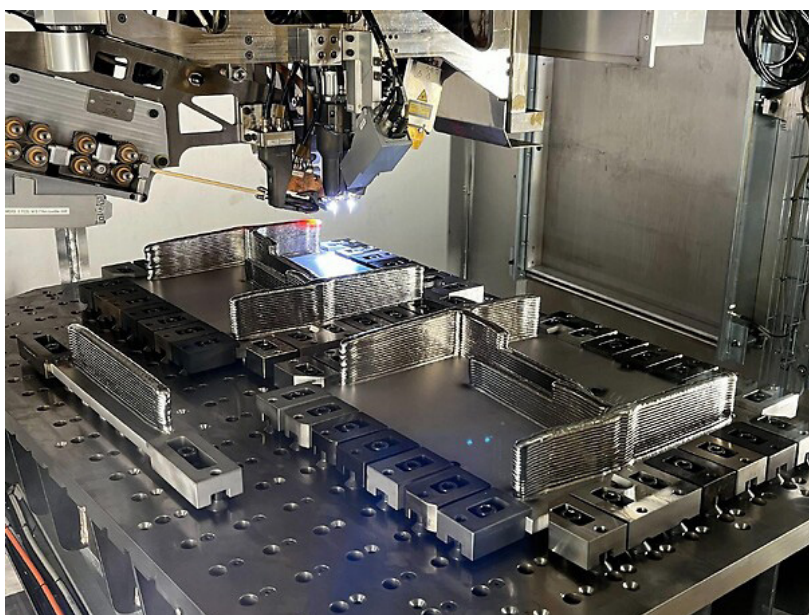
Why focus on titanium? While the metal is essential for aircraft due to its strength, lightness and compatibility with modern carbon fibre composite structures (such as corrosion resistance, relative expansion coefficients and other properties). Titanium is also a high-value raw material, so conserving it is paramount.

Consider that traditional forging – i.e. machining a part from a solid block – creates a high proportion of raw material 'waste'. This is measured by the 'buy-to-fly' ratio – the amount of raw material purchased versus the amount that actually 'flies' in the aircraft. In traditional methods, one might need to recycle between 80% and 95% of the titanium originally bought.

With w-DED, such waste is mostly prevented at source. This is because the part is 'grown' into a shape that is already very close to the final design (a 'near net shape'), there is very little left to machine away. ▶



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Titanium is essential for aircraft due to its strength, lightness and compatibility with modern carbon fibre composite structures

Bringing agility to aircraft development

Traditional die forging also requires the creation of large, complex tooling that can take up to two years and require a large up-front capital investment. By contrast, a 3D printed part's shape is determined by a computer programme, reducing the lead time to just a few weeks. w-DED's agility will be of immediate benefit to the successful and timely construction of the first development aircraft, especially while the final detailed component designs are being tweaked and optimised, right up to the point when the first aircraft starts to take physical shape.

First proof in A350 production

Airbus has recently started serial integration of its largest w-DED parts into the A350's Cargo Door Surround area. These particular Airbus-designed parts for this exploratory phase were 3D printed by a qualified supplier using plasma w-DED, ultrasonically inspected by Testia Bremen and finally machined and installed in Airbus factories.

DED – First lower frame delivery

These parts are functionally and geometrically identical to the traditional forged components they replace, but they deliver immediate, real-world cost savings. Looking forward, the next aim is to progress, step by step, from the A350 w-DED parts and into more critical applications on other programmes and other aircraft applications (including the wings and landing gear in the longer term).

“Designed for DED”

Importantly, this technology enables a concept called ‘designed for DED.’ Instead of having engineers design a complex component as an assembly of several separate pieces that must be joined together, they can now design it as a single, intricate and optimised component that is printed all at once. This ability to

merge multiple components into one will simplify the supply chain, reduce assembly labour, shorten cycle time and unlock the full potential of the next generation of 3D-designed airliners.

The race is on...

Today in Airbus and its partners the race to accumulate experience of w-DED for critical parts is well underway, with very promising success. Engineers are testing various energy sources, including plasma, arc welding, electron- and laser beam, and simultaneously evaluating “Buy” (outsourcing the printing) and “Make” (doing it in-house) strategies. Moreover, being governed as an Airbus ‘group’ level approach, the resulting technologies will be an industrial standard and usable across the company. ■

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F-35 deliveries hit new record

Nearly 200 Joint Strike Fighters were delivered by Lockheed Martin to the Pentagon and other allied nations participating in the F-35 programme during 2025, a new record high.



Lockheed Martin delivered 191 F-35s during 2025, a record high for deliveries of the stealth fighter aircraft, and 35% more than during the previous high point – 142 delivered in 2021. “Annual F-35 production is now running at a pace five times faster than any other allied fighter currently in production, underscoring the programme’s scale and maturity,” according to Lockheed, the lead contractor for an extensive design and supply programme.

The delivery record is not likely to be topped soon. Lockheed has stated it can produce 156 of the aircraft per year.

What Lockheed does not mention in its announcement is that the exceptional rise in deliveries last year included a large number of aircraft held over from 2023-2024, when the Pentagon refused to accept deliveries of them because it had not approved the hardware and software revisions involved with the Technology Refresh-3 package – updates to the jets’ computing capabilities that increase data processing power, memory, and data storage. TR-3 updates are also understood to be a necessary bridge to the aircraft’s future Block 4 capabilities.

The F-35 is a series of single-engine, stealth-enabled aircraft deployed for ground attack and combat, and available

in three variants. The jets have been in production for more than a decade, and the Block 4 upgrade is focused on modernising the F-35’s capabilities with electronic hardware and software advances to facilitate dozens of new weapons systems.

While the cost of the F-35 aircraft is an ongoing point of contention between Lockheed and the Defense Department, both for the deliveries and sustainment of almost 1 300 jets in service for the US and more than a dozen allied nations, the programme continues to be funded and extended for future development.

In September 2025, the Pentagon and Lockheed Martin finalised terms for Lots 18 and 19 of the aircraft programme, agreements totalling \$24 billion for delivery of up to 296 F-35s. They are the largest production contracts to-date in the 25-year history of the programme.

Chauncey McIntosh, Lockheed’s F-35 programme manager, stated: “As our warfighters continue to employ the F-35 to protect the interests of America and our allies around the world, we’re committed to continuing to push the latest technology into the hands of the warfighter to defeat any threat.” ■

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TM10i XP 2-Axis	760	10"	Ø81	22	3,000
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L2 P 2-Axis	300	8"	Ø52	15	4,000
L3 P/T 3-Axis - Live Tooling	500	8"	Ø45	15	4,000
L4 2-Axis	800	10"	Ø75	15	3,500

Y-Axis & Sub-spindle options available



CNC TURNING CENTRES - FLAT BED



	Turning Length	Chuck Size	Bore	kW	RPM
CK6140 2-Axis	630	200mm	Ø56	5.5	2,400
CJK6132 2-Axis	1000	160mm	Ø38	2.2	2,500
CK6156x1500 2-Axis	1250	250mm	Ø80	7.5	2,000

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MachiningCloud partners with Sandvik Coromant

MachiningCloud has announced a partnership with Sandvik Coromant, making their tooling data available directly within our cloud-based platform. This collaboration allows users to find tools, build assemblies, and export data directly to CAM systems, streamlining process planning.

"This collaboration puts ready-to-use Sandvik Coromant tooling data into the hands of CAM programmers, helping reduce guesswork and keep production moving," said Paul Ricard, President and co-founder at MachiningCloud.

"This partnership reflects our ongoing commitment to improving access to high-quality tooling data. By expanding availability in customer-preferred platforms like MachiningCloud, we help reduce friction in tool selection and support our customers in taking their machining process to the next level," said Tobias Unosson, Business & Partner Development Manager at Sandvik Coromant.

Sandvik Coromant tools are now accessible alongside other brands in a multi-supplier ecosystem. Data is being added in phases to ensure quality, and access is free for all users.

About MachiningCloud

MachiningCloud simplifies job planning, tool management, tooling workflows, and improve consistency in CNC machining environments.



Contact Sandvik Coromant

TEL: 010 500 2295 or visit www.sandvik.coromant.com for further details.

Europe's automakers embrace cheaper gigastamping to cut costs

Europe's automakers are embracing a cheaper manufacturing alternative to gigacasting amid the industry's costly shift to electrification and increasing competition from China.

Gigacasting grabbed the spotlight after Tesla started using the technology to press whole floor sections of its Model 3 and Model Y electric cars, but the method is a very expensive process, said Gestamp CEO Francisco Riberas.

"It's not a trend that is really growing," Riberas said. "What we see instead is a use for gigastampings: Stamping a big part in one single stroke and substituting 20 or 25 different parts."

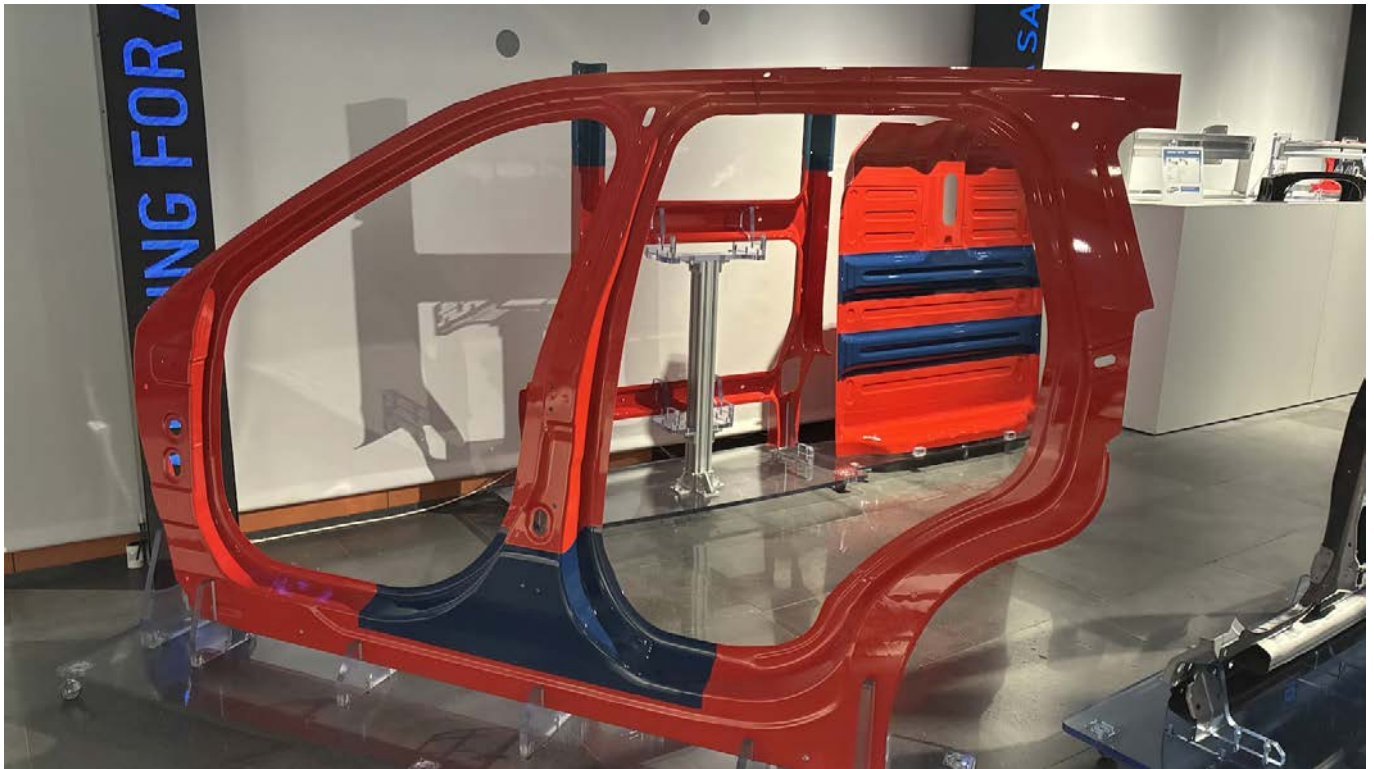
European automakers are adopting gigastamping, a more cost-effective, flexible alternative to Tesla-style gigacasting, to reduce production costs and compete with low-cost Chinese EVs, Automotive News reports. Unlike capital-intensive

gigacasting, this method uses existing stamping technology to create large body parts with fewer components, allowing European manufacturers to lower vehicle costs without massive investment.

While Chinese manufacturers (e.g., Nio, Xpeng) have adopted full-scale gigacasting, European firms are pivoting to gigastamping, a technique creating large, single components (like double-door rings) that reduce complexity and cost.

Why gigastamping? It allows European automakers to use existing, cheaper, and more flexible machinery rather than investing in new, expensive casting machines. The move is largely driven by the need to lower EV prices to compete with Chinese imports, which benefit from lower costs and state backing, amid a costly, slow-growth transition to electric vehicles.

Suppliers like Gestamp are enabling this shift, allowing ▶



automakers to reduce vehicle assembly steps, cut costs, and increase production efficiency.

This shift to gigastamping helps European manufacturers, such as Stellantis and Renault, to enhance cost efficiency, with Citroen, Automotive News says, already launching low-cost EV models to directly challenge Chinese competition.

Gestamp

Gestamp, the multinational specialised in the design, development, and manufacture of highly engineered metal components for the automotive industry, has designed a new family of products that, thanks to the use of proprietary technologies, allows the integration of functionalities in a single part: Gigastamping. This new family of products helps car manufacturers to reduce their internal car assembly times, lightens the component by up to 15%, and optimises the use of raw materials. Gestamp's Double Door Ring or One Piece Floor, offer a unique combination of increased crash and safety, lightweight, and CO2 reduction in a single product.

And in line with these products, Gestamp has developed a new safer, and lighter solution for the new EV architecture: One Piece Rear Frame. This solution offers the integration of the entire rear section into a

single piece using hot stamping technology.

In addition, the new EV architecture implies a change in the functions of the chassis, a key component of Gestamp's product portfolio. It is now not only important for driving stability and comfort but is also vital because it supports the engine and becomes important in the event of a crash. Gestamp's technological solutions propose a revolution in the design, development, and production systems of new chassis. Gestamp is a leader in the technologies of hot stamping and hydroforming. ■



FANUC named one of world's top 100 innovators for fifth year in a row



Clarivate recognises and ranks the top 100 most innovative corporations and institutions in the world based on proprietary patent data. With AI technology rapidly gaining importance, this year's listed companies represent 16% of all high-intensity AI-related inventions.

As evidenced by its recent partnership with artificial intelligence leader Nvidia, FANUC is focusing on AI technology to drive innovation within manufacturing. With industrial automation as a priority, it is actively investing in the research and development of advanced AI technologies, filing AI-related patents across a wide range of fields, such as numerical control devices and robot control.

The company is also enhancing its corporate value by

building a globally competitive intellectual property portfolio – according to a survey conducted last year by the Japan Patent Office, FANUC ranked 18th in Japan's patent filings for AI-related inventions.

More widely, FANUC aims to continue strengthening the competitiveness of its business, targeting sustainable growth and propelling intellectual property activities to support changes in the global business environment. By protecting and using intellectual property through technological innovation, the company hopes to solve social and environmental issues to contribute towards a more sustainable society.

For further information contact FANUC South Africa on TEL: 011 392 3610 or visit www.fanuc.co.za ■

Bosch has cut around 6 000 jobs in its mobility division in Germany

Bosch CEO Stefan Hartung told the *Stuttgarter Zeitung* and the *Stuttgarter Nachrichten* that 6 000 jobs have been cut in the mobility sector in Germany so far. The automotive supplier is currently responding to the changing industry and the subdued demand for electric vehicles. One of the countermeasures being implemented is a large-scale voluntary reduction programme. This affects approximately 22 000 jobs in the automotive division at its German locations, which are slated to be eliminated in the coming years. Hartung noted that Bosch still has the majority of the work ahead of it.

Around €2.7 billion in provisions have been set aside

Furthermore, agreements and settlements have been reached in negotiations with employee representatives at almost all affected locations in recent months. Hartung stated: "This was very challenging for both sides, but it makes a crucial contribution to closing the cost gap and thus

securing Bosch's competitiveness and future viability." The Bosch Group has, as is well known, set aside €2.7 billion for job cuts in 2025. According to the Bosch CEO, this means that all financial burdens are accounted for on paper – but not yet in reality. The provisions bring forward the impact on profits, but the money for departing employees will only be paid out in the coming years. Last year, almost €900 million was already paid out to departing employees.

A Bosch spokesperson announced that the necessary staff reductions will be implemented in a socially responsible manner, offering early retirement and phased retirement, voluntary severance packages, and placement in other internal or external positions. The local agreements also include measures such as investments in future-oriented fields and the safeguarding of training departments, the spokesperson added. This will most likely close the annual cost gap of €2.5 billion in the mobility division, thus securing Bosch's competitiveness and future viability. ■



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ROUND BAR

EN3 | EN8 | EN9 | EN19 | EN24 | 18CRNIM07-6

HOLLOW BAR

ST52 | EN8 | EN19

PLATE

S355J2+N | BENNOX | NM400 | NM500

German machine tool industry focuses on diversification and technological leadership

Industry calls for economic policy reforms – with speed and clear priorities.

After two years of decline, the German machine tool industry expects production to grow by 1 per cent to 13.7 billion euro in 2026. “The fundamental basis for this is the expected recovery of domestic demand,” says Franz-Xaver Bernhard, Chairman of the VDW (German Machine Tool Builders' Association), explaining the forecast at the annual press conference. In 2025, investments were stifled by high costs, insufficient planning security and the absence of economic reform to revitalise Germany as a manufacturing location. In the current year, positive effects are expected from the so-called “special assets” of the German federal government, which have been set up for investments in infrastructure, defence, climate protection, digitalisation and mobility, and could provide at least a small boost.

By 2025, production had fallen by 8 per cent. Compared to the highest result in 2018, the difference is thus one-fifth. Adjusted for price, the gap is actually 35 per cent. The decline affects both exports and domestic sales equally. Exports were in decline in all regions of the world. Only a few of the top 15 foreign markets were able to grow.

China on the fast track internationally

“We are very concerned about competition from China,” says Bernhard. As expected, China has massively boosted their machine tool exports by 18 per cent in accordance with its government’s strategy. The development was reinforced by weakness in domestic demand. As a result, German manufacturers had to relinquish their international leadership position in exports to China. The country is dramatically increasing its position in the ASEAN region, in Brazil, the Middle East and in North Africa. Exports to some EU countries are continuing to increase, for example to Germany, Poland and Italy, even though the total imports of these countries have actually declined somewhat in recent years.

“Not good news,” states Bernhard. “However, we are making intensive use of all options available to us to adapt to structural change,” he says. Unfortunately, this ultimately also requires capacity adjustments. Up until October 2025, the workforce in corporations with more than 50 employees dropped, compared to the previous year, by 3.9 per cent to 63 300 men and women.

In order for the industry to regain momentum, it must exhaust all available options. In addition to capacity adjustments, these include foreign production, market diversification, expansion of technological leadership,



intensification of research activities, and recruitment of excellent employees.

Local for local is becoming increasingly important

Twelve of the largest machine tool manufacturers are now producing abroad. Their foreign production accounts for a good fifth of total German machine tool production. 45 per cent are generated in Europe, 32 per cent in China and 20 per cent in the USA. It compensates for declining exports to important markets and stabilises the overall results of companies. “Companies that recognise this have a better chance of participating more strongly in local market growth despite existing trade barriers and also realising cost advantages,” says Bernhard.

Diversification of sales markets – Focus on Europe

In 2025, German exports to its largest markets declined sharply due to US tariffs and falling imports to China. The top sales region of the German manufacturers is the European home market, which accounts for around half of the exports. Add the German market to this and more than 60 per cent of the machine tool sales are realised in the region. Customer sectors such as defence, aircraft construction, electronics, energy or medical engineering hold a great deal of promise. The expansion and consolidation of critical infrastructure for batteries and chips, for establishing hydrogen technology, digitalisation and for building data centres are freeing up investments in Europe. These will not be able to surpass the automotive industry in its importance, but they will soften the pressure of the transformation.

To read the full press release visit

<https://vdw.de/en/german-machine-tool-industry-focuses-on-diversification-and-technological-leadership/>

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AGENTS

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Pioneering grinding technologies at GrindingHub

Preparations for GrindingHub 2026, taking place from 5 to 8 May 2026 in Stuttgart, Germany, are picking up speed. The most recent data reveals an exhibitor list of 360 companies.

“The participation of leading manufacturers from the grinding technology sector shows the industry's clear commitment to GrindingHub as a place for exchange, innovation and international networking,” says Dr Markus Heering, managing director of event organiser VDW (German Machine Tool Builders' Association).

“It's much more than just a trade fair – it's the place to be for anyone who is interested in exchanging ideas and finding solutions for pressing production problems related to grinding technology. Keeping this dialog going is particularly important at the present time when the economy is struggling,” continues Dr Heering.

Grinding technology industry here to stay despite difficult times

The persistently weak economy is reflected in the latest figures – however, incoming orders for grinding technology have at least stabilised after two years of decline. They rose by 4% in the first nine months of 2025 – driven by customers outside of Germany with an increase of 17%. The Eurozone in particular (up 32%) is the driving force behind this trend. Germany, on the other hand, recorded a drop of 24%. At -14%, turnover is significantly below the previous year. Compared to the mechanical engineering sector as a whole, incoming orders are slightly better, but turnover is still down.



Despite these challenging conditions, leading companies see the value of GrindingHub as a strategic platform. Fabian Moos, managing director of Danobat-Overbeck GmbH highlights the importance of visibility and customer loyalty: “For Danobat, GrindingHub is more than a platform to present technological progress. Since 2022, it has given us the chance to engage openly with customers, understand their real challenges, and use this feedback to guide the evolution of our solutions.”

For further details visit www.grindinghub.de

Mastercam unveils rebrand centred on “Challenge Accepted” mindset

Mastercam has introduced a rebrand that positions the CAM software leader around a simple message: “Challenge Accepted.” The refreshed brand is designed to reflect both the increasing complexity facing modern manufacturers and the company's long-standing role in tackling difficult, high-precision work across aerospace, medical, automotive, and other advanced industries.

The rebrand draws on Mastercam's four-decade history, from its origins as one of the first PC-based CAD/CAM systems in the early 1980s to its current status as the world's most widely used CAM software. Rather than focusing on product features alone, the new identity emphasises a mindset – one rooted in innovation, practical problem-solving, and supporting manufacturers when

tolerances tighten and timelines shrink.

“Challenge Accepted” also aligns the brand with broader industry shifts, including automation, AI-assisted programming, and digital manufacturing workflows. Mastercam is positioning the updated look and messaging as a signal that its software, support network, and education footprint are evolving alongside these demands.

For customers and partners, the rebrand reinforces Mastercam's role not just as a CAD/CAM provider, but as a technology backbone for shops and enterprises taking on increasingly complex work – where “too difficult” is no longer an option.

For further details contact Mecad Manufacturing on TEL: 012 645 4300 or visit www.mecadmfg.co.za

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PRODUCT

Model | Inductotherm, 110kW Acutrak 300kg aluminium furnace, 2022
Condition | Very good working condition
Crucible | Brand new, never been used, silicon carbide
Cooling | Air cooled, built-in cooling/circulation fan

SPECIFICATIONS

Type | Non-tilting furnace
Power | 400V three phase
Melting capacity | +-250 kg/hr for aluminium ingots
Suitable for | Can be used to melt most non-ferrous materials
Spare parts | New spare motherboard, spare diodes and capacitors, all manuals included

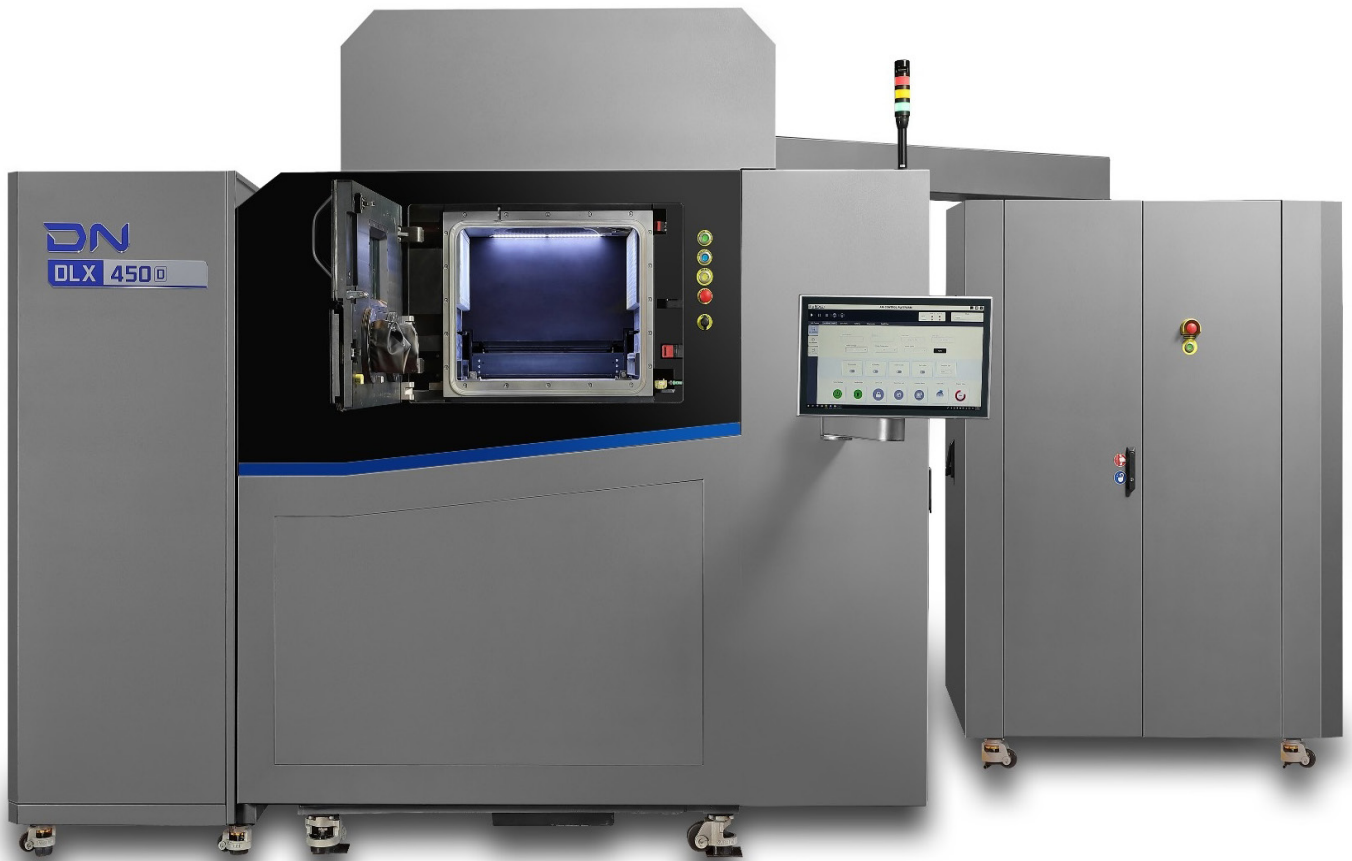
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DN Solutions to open new Additive Solutions Centre Europe



DN Solutions, the South Korean machining solutions manufacturer, has announced it is establishing its Additive Solutions Center Europe in Gütersloh, Germany. The new facility will host DN's full Additive Manufacturing process chain, from powder to finished part.

DN Solutions offers advanced metal additive manufacturing through its new DLX Series (Laser Beam Powder Bed Fusion), designed for complex, high-precision industrial components. These systems, announced in early 2025, enable integrated production by combining 3D printing with CNC finishing.

DLX is compatible with a range of materials, including aluminium, titanium, copper, Inconel, and maraging and stainless steels.

With the addition of the metal 3D printer to its product portfolio, DN Solutions combines additive and subtractive manufacturing for the first time, completing the manufacturing process. The synergy of 3D printing and CNC technology creates new, highly complex components in the shortest production time.

The DLX series is DN Solutions' global entry into the rapidly growing market for additive technologies. With its first industrial-grade LPBF metal 3D printer, the company is targeting applications where conventional manufacturing processes reach their limits, such as lightweight components, organic structures or function-optimised metal

components. At the same time, the metal 3D printer offers solutions for the entire production chain in combination with established machining production processes.

The aim is to close the previously missing end-to-end link between LPBF and CNC processes. Through the systematic integration of software, automation and component handling, DN Solutions creates the basis for scalable turnkey solutions along the entire process chain.

The flagship of the new Additive Manufacturing division is the DLX 450D. The industrial high-performance 3D printer is suitable for 24/7 production and offers an exchangeable build container to minimise non-productive time, a multi-laser system for high printing speed and a build volume of 450mm by 450mm by 450mm.

DN Solutions' Laser eXecution (DLX series) Laser Beam Powder Bed Fusion (PBF-LB) Additive Manufacturing machines are intended to offer full integration with other DNS systems, including its CNC machining, automation and software.

DLX is compatible with a range of materials, including aluminium, titanium, copper, Inconel, and maraging and stainless steels.

The new facility will host DN's full Additive Manufacturing process chain, from powder to finished part.

Contact Retecon Group Company Puma Machine Tools on TEL: 011 976 8600 or visit www.pumamachinetools.co.za for further details. ■

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Introducing Sandvik Coromant's CoroMill® MR20: For controlled profile milling with unmatched stability

CoroMill® MR20 sets the new standard in secure, high-performance profile milling.

Cutting tool specialist Sandvik Coromant has launched CoroMill® MR20, an advanced indexable milling concept engineered to deliver unmatched stability, predictable performance and exceptional metal removal rates across demanding materials and applications. Designed for manufacturers who require absolute process security, CoroMill® MR20 brings new levels of confidence and productivity to profiling and face milling operations.

CoroMill® MR20 is a single-sided round-insert concept optimised for ISO M, ISO S and ISO P materials. Its combination of security and versatility makes it ideal for pocketing and complex profiling in titanium and other HRSA materials used in aerospace, as well as in oil and gas components. The tool also excels in ISO P die and mould applications, delivering reliable roughing and semi-finishing performance. In ISO M materials, it handles heavy metal removal for pump and valve components with the high predictability and productivity these industries demand. CoroMill® MR20 is Sandvik Coromant's first-choice solution for these applications.

"Our goal while developing CoroMill® MR20 was to create a polyvalent cutter that offers the highest level of process security," says Alvaro Ruiz, Global Product Application Specialist at Sandvik Coromant. "Customers machining high value components need predictable, repeatable performance – and CoroMill® MR20 delivers exactly that."

CoroMill® MR20 is engineered not only for performance but also for more sustainable machining. By enabling higher feed per



tooth, the tool reduces the energy required during machining. Its long tool life means fewer inserts are consumed, lowering the overall carbon footprint associated with production.

"Increasing feed capability while extending tool life means fewer resources used and less waste generated," Alvaro Ruiz explains. "It's a win for productivity and for sustainability."

An advanced tool design ensures superior resistance to fatigue and deformation ensuring repeatability and long cutter body life. The new integrated under-coolant system guarantees high performance, especially in long-chipping and difficult-to-machine material. One of the key innovations is the optimised insert seat design, where the large contact area between

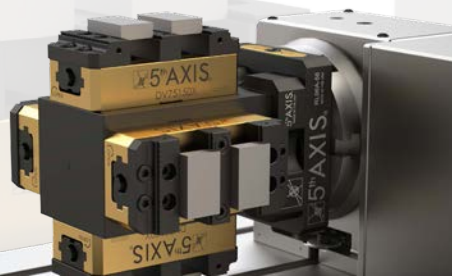
the insert and cutter body minimises micro-movement for maximum stability.

The six-edged insert features a thick, robust body for exceptional bulk strength and superior edge-line security. Tight manufacturing tolerances promote gradual and predictable insert wear, supporting efficient, unmanned production, minimised scrap and maximised operational uptime.

With its combination of stability, versatility and cutting efficiency, CoroMill® MR20 equips manufacturers to push performance boundaries while maintaining full control of their process.

For further details contact Sandvik Coromant on TEL: 010 500 2295 or visit www.sandvik.coromant.com





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**We lead tools to max
performance**



Amada launches SRB-1003 press brake

A new standard in precision, ease of use, and seamless integration.

Bending machinery has evolved over many years and bending is a process which every sheet metal shop has had some expensive lessons from. Bending is an art which in the past was only mastered after many years of experience, trial and error. Today, bending equipment has reached a technological level that drastically reduces the reliance on experienced operators and machine setters. The CNC control has made the bending process a lot easier for all, thus reducing the operator skill required.

As a result of demand for consistent, accurate bending, Amada has launched a bending machine called the “SRB”, this machine is a lower cost entry level unit that still offers similar accuracy, reliability, repeatability, and ease of use as that of the high-end machines.

This 3 metre servo hydraulic bending machine is equipped standard with a 4-axis and a touch screen control, which controls the bending beam in the downward direction during operation. The beam cylinders – left and right – can be controlled independently via the CNC control which now allows for “off centre” bending to be done too. In keeping with Amada’s interchangeability and versatility concept, this machine still utilises the standard type of tooling that Amada has always supplied through the years (Standard Amada Press Brake Tooling).

The user friendly AMNC3i control – on a pendant arm for comfortable operation positioning is designed for easy operation. It offers customisable settings for operators and clear intuitive operation. The machine can either be programmed via the touch screen input or by utilising the networkability which means all programming, tool fitting and prototype simulation can happen in the programming software before the operator actually receives the job. Once the programme is transferred to the control via the LAN, the operator is then prompted via the control – to position the tools as required for the specific bending job.

The same happens with the bending sequence. The 3D display clearly shows the operator how to position, where to position and when to rotate the part for the next bend operation.

This interaction now allows for an in-experienced person to operate the machine with ease as all the planning was done in the programming office before the programme is generated.

The unique natural crowning system of the SRB is a proven system that counters beam deflection under pressure. This ensures consistent bends over the entire bed length. The 350mm open height also allows for the bending of longer flanges than what was possible on the predecessor – the RG press brake series.

The 2-axis back gauge has a high speed traverse of up to 30m / minute with a positioning accuracy of $\pm 0,1$ mm. The back-gauge has a traverse distance of up to 600mm in length and a Z-axis movement range of 30mm to 180mm. The standard feature of a 3 position foot pedal, safety light-curtain and rear guard all ensure operator safety from all aspects of operation.

This 3 meter – 100 ton bender with its user-centred design is available with additional options such as the Infra-red Digi-Pro (Digital Protractor), Infra-red Digi-Nogi (Digital Vernier), VPSS4i Bend software and a full variety of tooling to suit your bending needs.

Designed with global manufacturing needs in mind, the SRB-1003 combines innovation with cost-efficiency. Its robust feature set makes it ideal for both experienced users and first-time customers seeking reliable, high-performance bending solutions.

For further details contact Amada Johannesburg on TEL: 011 453 5459 or visit www.amada.co.jp



OPEN MIND Technologies AG receives TISAX label

Reliable information security for the secure exchange of sensitive data.

OPEN MIND Technologies AG, one of the world's leading manufacturers of powerful CAD/CAM solutions for machine and controller-independent NC programming has successfully completed a TISAX assessment in accordance with VDA ISA requirements and received the TISAX label.

By receiving the TISAX label, OPEN MIND is strengthening its position as a trusted partner to the automotive industry and sending a clear signal about its commitment to high standards in information security.

TISAX (Trusted Information Security Assessment Exchange) is a cross-industry recognised standard for assessing information security. Developed by the automotive industry to protect sensitive information along the value chain, the assessment is based on the VDA ISA (German Association of the Automotive Industry Information Security Assessment) and creates a uniform basis for the secure exchange of confidential information between companies.

For customers and partners, the TISAX label demonstrates added value and an assurance that OPEN MIND has implemented structured measures to protect sensitive information. The exchange of confidential information is thus based on clearly defined, industry-specific security requirements.

“With the TISAX label we provide to customers and partners, it is additional proof of fundamental layers



of security that information security at OPEN MIND is implemented consistently and in accordance with recognised standards,” explains Hagen Rühlich, Senior Project Manager/ Consulting at OPEN MIND.

The TISAX assessment was carried out by BSI Group Deutschland GmbH and is valid for three years. The results are available exclusively via the ENX portal. TISAX is a registered trademark and is subject to the ENX Association. With TISAX, the ENX Association supports the joint acceptance of information security audits in the automotive industry on behalf of the VDA. TISAX and TISAX results are not intended for general public.

For further details contact Hi-Tech Machine Tools on TEL: 011 608 0088 or visit www.hitech.co.za

Kennametal launches first choice tooling range

Kennametal has announced the launch of its First Choice tooling range, designed to simplify tooling selection and enhance machining efficiency. This new offering aims to cover up to 80% of daily machining tasks, minimising the reliance on specialised solutions.

The First Choice tools boast not only easy selection but also reliable performance across a variety of applications. These tools are ready to ship, ensuring quick availability for manufacturers looking to streamline their operations.

Kennametal's comprehensive portfolio is engineered to meet the diverse needs of the manufacturing industry, providing solutions that promote efficiency and reduce downtime. The tools' versatility means they can be seamlessly integrated into existing systems, making them a practical choice for manufacturers seeking to optimise their processes without the complexities of specialised tools.

Kennametal remains a leading provider of metalworking tools and solutions, consistently innovating to meet the demands of a rapidly evolving industry. By prioritising performance and accessibility, they continue to support manufacturers worldwide in achieving operational excellence.



Manufacturers can explore Kennametal's diverse tooling offerings by visiting their comprehensive portfolio online.

For more information contact Kennametal South Africa on TEL: 011 748 9300 or visit www.kennametal.com

Mazak's new QRX-50MSY offers high-volume production

Mazak has introduced the QRX-50MSY CNC turning center that provides manufacturers the speed and versatility for high-volume production of small, intricate parts in a compact, affordable machine, the company reported.

"The QRX-50MSY's combination of milling capability, second turning spindle, and Y-axis functionality with advanced technology, productivity, and value delivers exceptional performance for shops machining small parts such as EV input shafts, mid-shafts, valve fittings and other components exceeding 2 in. in diameter," said a company spokesperson.

The QRX-50MSY is the latest adaptation of Mazak's versatile HQR Series 2-turret/2-spindle CNC turning center that has similar milling and Y-axis functions. The QRX-50MSY features a 15% smaller footprint with floor dimensions of 119.3" (3 030mm) by 86.6" (2 200mm) while maintaining throughput and reduced cycle times. Additionally, the QRX-50MSY's modular design uses common machine components such as identical left and right spindles, upper and lower turrets, and upper and lower carrier drives. The modular nature of the QRX-50MSY keeps machine cost down to maximise a manufacturer's return on investment when producing small parts.

The QRX-50MSY features a maximum bar diameter capacity of 2.0" (50mm) with a 6" (152mm) diameter chuck and a slant bed design. The main and second spindles use 20HP (15kW) motors that provide maximum speeds of 6 000RPM. The 12-station/24-tool position upper and lower



Mazak has introduced the QRX-50MSY CNC turning center

turrets feature 7HP (5.3kW) rotary tool spindles that offer maximum speeds of 6 000RPM.

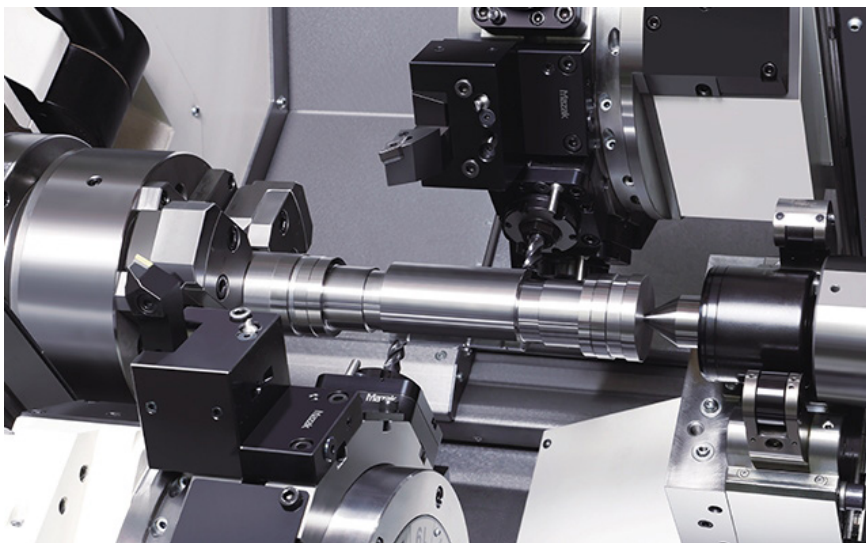
The machine's toolholding utilises a Basic Metric Tooling (BMT) 45 interface for fast, precise tool changes and optimised performance. The interface uses static and driven tools and supports a wide range of toolholder types, including radial, axial, and angular holders. The BMT 45 interface allows tools to be rotated 180° for use on second operations, eliminating the need for tool changes between operations.

The QRX-50MSY is equipped with a work unloader over the top of the second spindle that shops can equip with a gripper or parts bucket to remove parts from the machine. An auto parts catcher mounted on the lower turret catches parts at the second spindle head, or positioned beneath the main spindle, it can also accommodate end-of-bar remnants.

The machine comes standard with the MAZATROL SmoothG CNC that includes MAZATROL conversational programming as well as EIA-ISO G-code programming capabilities. The control provides ease of operation with its 19" touchscreen and 3D model-based graphical user interface for intuitive operation like that of smartphones and tablets. The control also incorporates a wide variety of advanced programming functions for ease of use and high-speed, high-accuracy machining performance.

Every Mazak machine is backed by Mazak MPower Complete Customer Care, its comprehensive machine support programme. Plus, Mazak Capital Equipment Financing (MCEF) allows shops to easily move their manufacturing forward with one-stop, factory-direct financing on Mazak equipment.

For further details contact Hi-Tech Machine Tools on TEL: 011 608 0088 or visit www.hitech.co.za



Simultaneous machining with upper and lower turrets enables efficient mass-production machining of shaft shapes. The 2 turret and 2 spindle machine construction allows simultaneous left and right hand machining, enabling efficient mass-production machining of bar shapes

Laser Systems

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The ALFlak's laser arm projects a great distance to effortlessly reach its welding position, even in deep or complex molds. Welding seams up to 500 mm are possible without relocation. Your advantage: The welding process can be performed without constant repositioning.

The ALFlak comes in two versions: with a self-propelled caterpillar track or a model that can be moved manually.

Choose the laser source that fits your requirements: You can choose Nd:YAG 200 W or 300 W laser sources or fiber lasers with output of 300, 450, 600 or 900 W.



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Extremely short set-up times allow a vast range of machine components, pressing tools and large molds to be repaired and modified with the ALM at any imaginable location.

The ALM's versatility is impressive. The workpiece can be transported to the laser, or the laser to the workpiece. This ensures mobility within the company or at the customer's.

The ALM is air cooled and requires no additional cooling system. Just move the laser to the workpiece, secure the laser area, aim the slim laser arm at the weld, and start welding.



Mastercam 2026.R2: _____

Power, precision, and productivity redefined

CAD/CAM software specialist Mastercam has announced the release of Mastercam 2026.R2, the second instalment in its new semi-annual release cycle.

This shift from annual to semi-annual updates reflects Mastercam's commitment to delivering continuous innovation and responding to the evolving needs of modern manufacturing. Rather than waiting a full year between major updates, customers will now receive significant new capabilities twice per year.

"Our customers told us they needed faster verification, less time on repetitive tasks, and quicker access to new capabilities," said Nand Shivkumar, chief innovation officer at Mastercam. "The move to semi-annual releases means we can respond to what shops are asking for without making them wait. When simulation runs in seconds instead of minutes, and an AI assistant handles routine programming steps, machinists can focus on the work that actually requires their expertise."

Mastercam 2026.R2: New features

GPU simulation: Speed meets accuracy

The new GPU simulation delivers high-resolution verification without extended processing time. In testing, verification that took nearly 90 minutes with CPU simulation completed in just over 22 minutes with GPU acceleration – maintaining the accuracy programmers depend on while dramatically reducing wait time. Shops working with complex multi-operation parts can now run through collision detection and material analysis without compromising their production schedule.

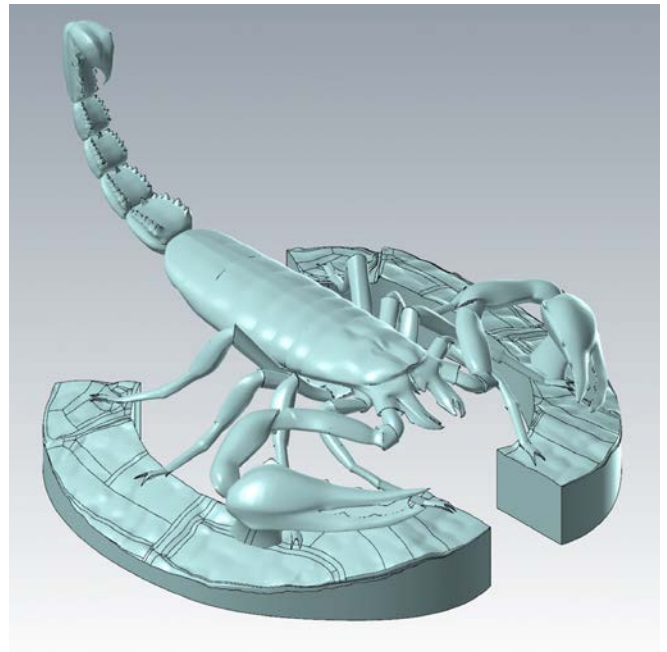
Mastercam Copilot intelligent CAM assistant

Mastercam Copilot brings AI automation to everyday programming tasks. Machinists can adjust feed rates and spindle speeds across multiple operations using voice or text commands, with confirmation prompts built in for safety. The assistant supports approximately 200 toolpath types and can build complete machine groups based on verbal descriptions. A hands-free mode, activated by the keyword "Copilot," enables voice-controlled operation for users who prefer to keep their hands on the work.

Copilot also searches the myMastercam video library, returning answers with timestamps that link directly to relevant training content, eliminating the time spent scrubbing through tutorials to find specific information.

Multi-axis advancements: Complex made simple

For shops pushing the limits of precision, Mastercam



2026.R2 introduces automatic tilting with bullnose endmills, improved 4-axis swarf milling, smarter clearance plane calculations, and optimised level-based ordering, reducing cycle times and improving part quality.

Probing upgrade: Blum Digilog setter support

This release adds support for Blum laser tool setters across major CNC controls, enabling users to output tool setting macros directly from Mastercam. Tool height offsets, wear checks, and breakage detection are now managed within the application, eliminating manual edits and streamlining setup. The integration works with FANUC, Siemens, Okuma, Heidenhain, Mazak, and Makino controls, keeping tool data centralised without requiring manual code editing.

Availability

Mastercam 2026.R2 is available now and offered as a free update to all customers on an active Mastercam 'Connect' maintenance and support plan.

For further details contact Mecad Manufacturing on TEL: 012 645 4300 or visit www.mecadmfg.co.za ■

LK Metrology unveils _____

blue laser scanner for CMMs

A next-generation laser scanner designed for use on coordinate measuring machines (CMMs) has been launched by LK Metrology, a global leader in precision metrology solutions.

Building on the success of the L100, the new L100NX introduces advanced blue laser technology, delivering superior

scanning performance, accuracy and user experience.

Unlike its predecessor, which used red laser light, the new scanner employs a 450nm blue light laser that significantly reduces noise in scan data, resulting in cleaner and more reliable measurements. This advance is particularly beneficial for high-precision applications where data integrity is critical, ▶

such as in the aerospace and automotive sectors.

The L100NX combines speed and precision with a wide stripe width of 110mm and a scanning rate of up to 530 000 points per second, making it ideal for inspecting large components productively. Its high accuracy ensures that even the most demanding inspection tasks may be handled with confidence.

At the heart of the L100NX is LK's 4th generation ESP (enhanced sensor performance) technology, which intelligently adjusts laser power for all of the 2 000 points on the laser line. This allows the scanner to measure multi-material assemblies and shiny surfaces seamlessly without surface preparation or other manual intervention, streamlining the inspection process and reducing operator workload.

To further enhance usability, the sensor features an integrated rotation adaptor, enabling optimal orientation of the scanner for inspecting complex part geometries. Additionally, an integrated FOV (field of view) projector visually displays the scanner's coverage area directly onto the part, simplifying programming and setup.

The L100NX scanner kit comes in a protective casing that, in addition to the scanner itself, contains all necessary accessories and documentation required for operation and basic maintenance.

Kristof Peeters, product manager for laser scanners at LK Metrology says: "The L100NX represents a major leap forward in laser scanning technology. By combining blue laser precision with intelligent sensor performance and user-friendly features, we're delivering a solution that meets the evolving needs of modern manufacturing."

"The launch of the L100NX underscores LK Metrology's commitment to developing innovative metrology equipment that empowers customers to achieve greater efficiency and accuracy in their inspection processes."

For further details contact WD Hearn Machine Tools on TEL: 021 534 5351 or visit www.wdhearn.co.za



Marposs' M62 Flex manual bench gauge system

The electrification of conventional powertrains and the development of new electric drive units is also involving gear manufacturing. Electrified transmissions are subject to several challenges and requirements. Notably, the number of gear wheels is significantly reduced in electric vehicles due to the use of one or two-speed reducers instead of the classic manual or twin-clutch gearboxes. In return, the quality of these gears must surpass current standards. Therefore, the need to build up knowledge and experience in the field of gear inspection is more crucial than ever.

Marposs offers a very wide range of solutions and applications for gear inspection by relying on decades of experience in this field. By providing sensors for machine monitoring, off-the-shelf solutions, and complex customised

applications, Marposs positions itself as the perfect partner to help keep the entire gear manufacturing process under control.

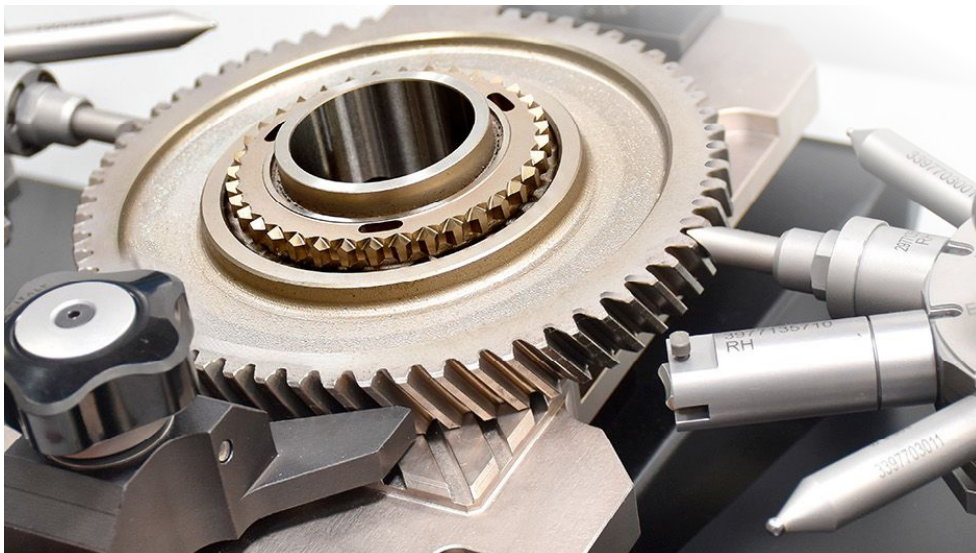
Marposs' M62 Flex manual bench gauge system for the production floor provides the flexibility to measure gears with different diameters without mechanical retooling. Using a universal reference Vee on a 30° angle eliminates the need for an ID centering post (or nose piece) to locate each part for measuring and reduces setup time.

The gauge employs servo-driven actuators and integrates soft-touch technology when engaging with the gear being measured. Soft-touch technology addresses the issue where green parts and master parts could be damaged by the measuring contacts. The M62 soft-touch technology employs a software routine where the measuring group can approach

a gear surface in velocity mode, with a controlled low force, while the position error is monitored, resulting in better control of the process and avoiding damage.

The M62 Flex can inspect odd- or even-toothed helical and spur gears with external diameters from 30mm to 180mm, heights from 15mm to 40mm and from 1 to 4 modules. It has mechanical turrets with capacity to locate up to 12 contacts each and is suited for inspecting DOB (MdK), major diameter, and minor diameter.

Contact RGC Engineering on TEL: 011 887 0800 or visit www.rgcengineering.co.za for further details.



Blaser Swissslube B-Cool Motec 501 coolant designed for automotive parts production

Productivity, economic efficiency and machining quality are factors that critically depend on selecting the right metalworking fluid for your application. B-Cool Motec 501 from Blaser Swissslube is the first water-miscible coolant that has been developed specifically for the challenges of high-volume automotive parts production.

“Everyone understands the importance of having the right CNC machine, choosing the best cutting tools for the application, figuring out the workholding and assigning the right operator to the job,” says Carsten Witthuser, managing director of Blaser Swissslube Americas. “These are the big costs attributed to manufacturing any part, but with so many decisions, coolant can be an afterthought and many shops do not take time to consider the critical importance of choosing the right one for their application.”

The right metalworking fluid must ensure efficient lubrication to achieve precise concentricity and flawless part finishes.

B-Cool Motec 501 is a modern, semisynthetic metalworking

fluid with a unique chemical platform that makes it highly suitable for series production in the automotive industry. The formula offers outstanding tool life, foam control, cleanliness and efficiency. It promises to deliver a productivity boost to manufacturers of engine components and housings, alloy wheels, turbochargers and other precision parts with a minimal investment.

Key benefits of B-Cool Motec 501

In the laboratory and field trials, B-Cool Motec 501 scores high for material compatibility, including alloys frequently used in vehicle production such as aluminium-silicon-copper and aluminium-silicon-magnesium. The good rinsing behaviour keeps parts and machines clean, and the high stability of the emulsion reduces maintenance time. Together with low top-off rates, users have experienced up to a 21% reduction in production costs.

For further details contact Hi-Tech Machine Tools on TEL: 011 608 0088 or visit www.hitech.co.za



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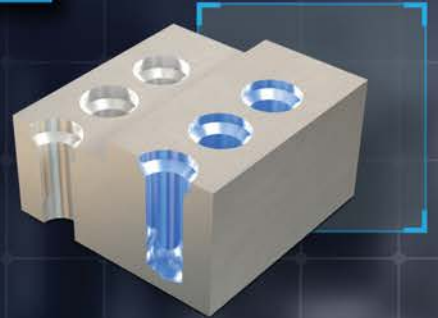
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