



UNIFABS strengthens 'design to delivery' offer with investment in new AMADA machine tools

Nuneaton-based Unifabs has installed a brand new AMADA REGIUS high-speed CNC fibre laser profiling centre with load/unload automation and storage. The company, which is targeting 25% growth in 2022, says **the machine has already improved laser cutting speeds by 50% for certain parts**. To further improve its 'design to delivery' offer for customers, the company has also placed an order for a new AMADA HRB-ATC, the first mid-range press brake in AMADA's portfolio to feature automatic tool-change capability.

Founded in 2007, Unifabs has grown into a £12 million turnover business with 125 people. Supplying precision sheet-metal parts to an enviable customer base of blue-chip manufacturing companies across a host of industries.

"Whether we're supplying sheet metal components just in time to a manufacturing line, or controlling the entire production process on a contract manufacturing basis, we operate as an extension of our customers' business", says Managing Director Tom James.

65% growth

Unifabs has seen growth of around 65% over the past two years and today operates from a single site with five factories that total 52,000 ft² of manufacturing space.

"We don't specialise in one particular sector, but strong-performing industries right now include HVAC, catering equipment and construction," says Mr James. **"To ensure timely deliveries to our customers we continuously invest in the latest manufacturing technologies."**

Maximising productivity

"We looked at different models, but along with the increased processing speed we really liked the automated setup features on the AMADA REGIUS, which we knew would help to reduce set-up/inspection time and maximise productivity," he says.

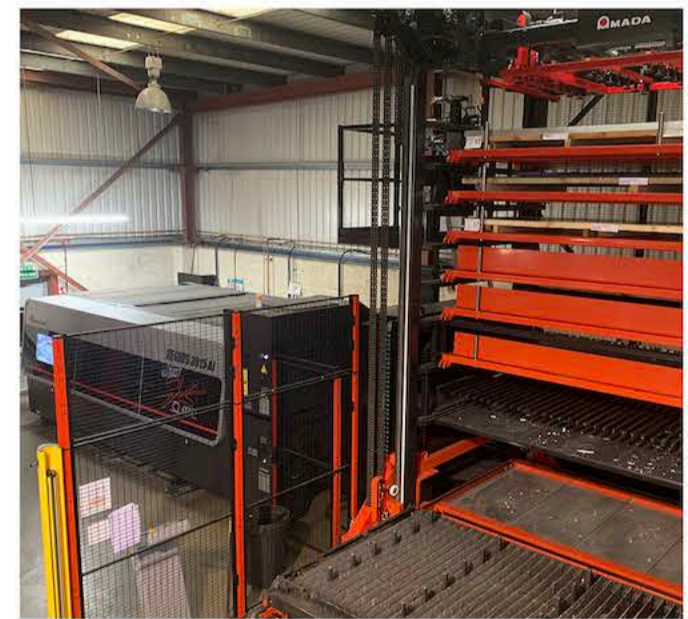
"Our goal is to be much more than just a supplier of sheet metal fabrications and parts. We want to be a manufacturing partner to our customers, supplying a start to finish service."

- Tom James, Unifabs Managing Director

Automatic inspection on the REGIUS utilises technology such as the AMADA i-Nozzle Checker to assess nozzle damage and circularity. If the nozzle requires changing (against a predetermined set of parameters), this will happen automatically via the machine's 16-station nozzle changer, negating the need for subjective operator judgement. A further function of the i-Nozzle Checker is automatic alignment of the nozzle centre if/when required.

Installed in November 2021, the AMADA REGIUS at Unifabs is primarily processing mild steel, galvanised steel and zintec from 1 to 8 mm thick. The machine features an AMADA ASLUL-3015 for the automatic loading and unloading of sheets and the storage of raw material, ensuring uninterrupted production runs and optimal machine utilisation. Typical batch sizes are in the region of 50 to 200. At present the company is running a double shift during the week, plus a weekend shift.

AMADA REGIUS is very easy to use," says Mr James. "It has several process monitoring systems that do much of the work for operators".



REGIUS features AMADA's new i-Process Monitoring system, which checks the wavelength of reflected light in real time to provide a reliable indication of good or poor cuts. Automatic head collision recovery is a further function of i-Process Monitoring. Machines without this function simply stop and issue an alarm, wasting valuable time.

More power: faster parts

"The REGIUS is a 6 kW laser, whereas our other AMADA laser capacity is 4 kW," says Mr James. "Combined with the more intelligent head movement, we find that any parts over 4mm thick are around 50% quicker to cut, shortening lead times for customers without any compromise in quality. It's a great step forward for Unifabs and our partners. The REGIUS is also more efficient and uses a lot less power than our AMADA FOL laser cutter, such is the advance in technology."

The high-specification REGIUS CNC fibre laser profiling centre is not only the fastest in AMADA's portfolio, but the first to integrate a number of key technologies: linear drives in all axes; the company's all-new laser integration system; and variable beam control technology.

Beyond laser cutting, Unifabs offers extensive sheet metal fabrication capabilities that include Design, CNC punching, CNC bending, welding, powder coating and final assembly.

Automatic tool change

Bending is a core business function, which is why Unifabs has placed an order for a new AMADA HRB-ATC. Adding to the company's existing seven AMADA CNC press brakes (HFE and HFP models), the HRB-ATC is the first at the company with automatic tool change capability.

"We have 10 people in our CAD team, so a lot of our work comes from the product development side of our business. However, these parts often have long set-up times, so we're really hoping that the new press brake's ATC capability will have a big impact on throughput in this area. We'll program a prototype part offline using AMADA software, send it to the new HRB-ATC and hopefully be folding metal within a few minutes."

AMADA's HRB-ATC features a full size ATC, offering exactly the same number of tool storage racks as the company's high-end HG-ATC press brake. The machine comes with a package of AMADA tools based on an assessment of the customer's manufacturing requirements. Importantly, the HRB-ATC is completely compatible with AMADA AFH standard tool sets. As a result, any existing customer using these tools can load them manually to the new machine if desired.

Direct customer benefits

"The new AMADA investments support our growth strategy and mission to continue as a trusted contract manufacturing partner to our customers," says Mr James.



"We manufacture a lot of samples, prototypes and small batch runs to help get components ready for serial production," explains Mr James.

"The new AMADA investments support our growth strategy and mission to continue as a trusted contract manufacturing partner to our customers," says Mr James. "While our customer service and communications set us apart from competitors, it's our investment in new technology that can impact factors such as lead time, providing a direct benefit for clients."

Of course, there are numerous industry challenges currently threatening to quell any potential gains, including labour shortages, but Unifabs has plans in place to overcome this issue.

"The retention of staff is challenging with so many companies seeking new employees," says Mr James. "However, we're now a real Living Wage accredited manufacturer, so we pay above the minimum. Furthermore, from January we'll be launching our Unifabs Academy in partnership with North Warwickshire and South Leicestershire College, with 10 youngsters starting a two-year bespoke apprenticeship to help support our growth trajectory."

He concludes: **"Alongside a number of good prospects for 2022, we'll keep striving to maintain great relationships with our existing customers. We're targeting £15 million turnover in 2022, which will represent 25% growth."**

