Glenmore Hane Group

Latest technology boosts growth at Glenmore Hane Group

"The **LCG-3015AJ** helps us to react quickly and flexibly.This is one of our differentiating attributes as a business, in combination with our quality and expertise."

Slough-based Glenmore Hane Group, a specialist in fine-limit sheet-metal fabrication for a wide range of industries, is using its investment in the latest automated AMADA laser-cutting and press-brake technologies to achieve an ever-stronger market position. Automation is the key word here, as the company says this factor has created a significant amount of extra capacity that in turn is supporting the generation of additional revenue.

With origins back to 1973, Glenmore Hane is in fact a company created from the 2014 merger of Glenmore Engineering Ltd, Glenmore Plating Ltd, Hane Instruments Ltd and AA Finishers LLP. The merged company moved into 12,000 ft² premises on the Slough Trading Estate and today supplies sectors that include aerospace, automotive, marine, defence, electronics, food, lighting, medical, pharmaceutical, scientific instruments and retail.

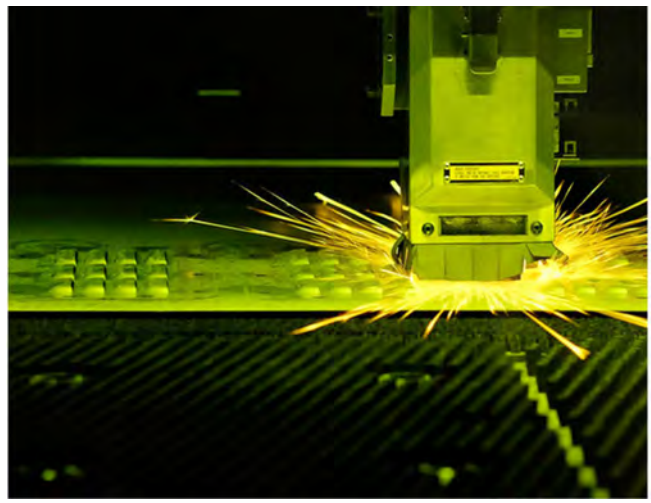
Aerospace currently constitutes around 65% of business, typically comprising seating components, such as seat pans, brackets and shrouds, as well as a number of parts for aircraft kitchen and serving areas.

"*We are set up to tackle anything from prototypes and 1-offs through to large batch runs*," explains the company's General Manager Mark Hall.

Glenmore Hane is a strong advocate of investing in the latest manufacturing technologies. A case in point is the recent arrival of an **AMADA LCG-3015AJ fibre laser.** The machine is now firmly bedded in and working hard, cutting 3 x 1.5 m metal sheets with ±0.01mm positional repeatability. Axis speeds of 170m/min (simultaneous) mean that parts do not suffer from heat distortion.

A table load weight of 920 kg and a 3 ton automatic loader/un-loader allows Glenmore Hane to run large orders on tight deadlines, around the clock. The company only operates a single-shift system, so the ability to run 'lights-out' is key.

"For us, the fibre-laser advantage is reduction in the melt effect on coated surfaces and cut edges," says Mr Hall. *"The fibre laser beam kerf is very clean and approximately 10 times smaller than with CO_2 lasers. In addition, real-time measuring sensors detect the slightest undulation and make material tolerance adjustments to help ensure zero rejects. Investing in this machine was one of the best decisions we've ever made."*



Aerospace seat fittings, computer cases, electronic plates, brackets and ducting are among the current applications for the **AMADA LCG-3015AJ**, many of which are required on very short lead-times.

"*The automation allows us to take on additional work – we've probably got more capacity now than we've ever had*," explains Mr Hall. *"Ultimately, it provides us with an opportunity to grow."*

"The ATC on the new press brake saves us so much time," confirms Mr Hall. *"Set-ups on other press brakes can take up to 40 minutes, but with the HG-1003ATC we can interrupt a series of 1000 parts, for example, and be bending a more urgent batch within a few minutes"*

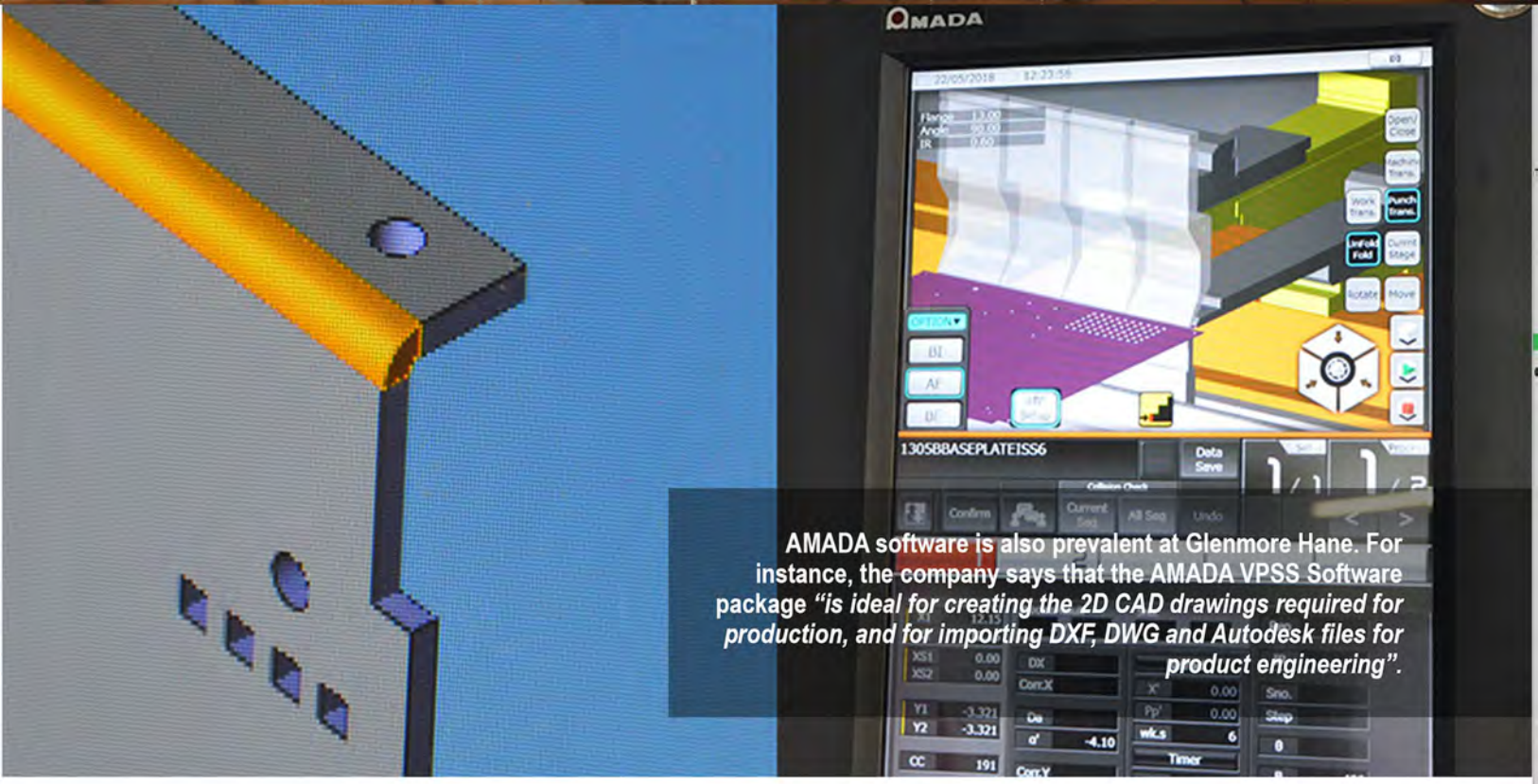
Some 80% of the company's components are made from aluminium, typically 1.5 mm thick 5251 aluminium alloy. In addition, the company produces parts from 0.5 to 5.0 mm thick in mild steel, stainless steel, brass and copper.

The company also makes use of an **AMADA LC-2512C1AJ punch/laser combination** machine for parts that benefit from integrated punching and tapping capabilities. AMADA's latest HS capacitance sensing head makes it possible to smoothly and quickly follow the sheet profile to maintain a consistent cut, even when the sheet is not 100% flat.

Another machine taking pride of place at Glenmore Hane is the **AMADA HG-1003ATC (Automatic Tool Change) press brake, which can load even the most complex tool layout within 3 minutes.**

*"The **ATC** on the new press brake saves us so much time,"* confirms Mr. Hall.

*"Set-ups on other press brakes can take up to 40 minutes, but with the **HG-1003ATC** we can interrupt a series of 1000 parts, for example, and be bending a more urgent batch within a few minutes. This capability means we are far more flexible. Moreover, I would estimate we get up to 20 times more out of the machine's operator as a result of the quicker set-ups. We have already ordered another machine."*



AMADA software is also prevalent at Glenmore Hane. For instance, the company says that the AMADA VPSS Software package *"is ideal for creating the 2D CAD drawings required for production, and for importing DXF, DWG and Autodesk files for product engineering".*

In addition, the company uses **AMADA Production Designer,** which imports 3D solid models (from SOLIDWORKS and various other 3D software packages) and automatically creates unfold drawings with accurate bend information that can be processed through the company's **AMADA VPSS 3i software,** where the NC code can be simulated in full before actual production.

All sheet metalwork at Glenmore Hane adheres to ISO9001:2015 quality management standards. Additional services offered by the company include graining, welding, anodising, priming, coating, assembly, packing and delivery, which means that some 48 staff are today employed across 12 departments.In-house finishing processes are a particular specialty. The company can offer chromic and sulphuric anodising, including black and hard anodising, as well as Alocrom 1000 and 1200 chromate conversion coating and non-chromate conversion coating such as Iridite NCP and SurTec 650V. Glenmore Hane can also apply 3M

Scotch-Weld™ E396O adhesive primer, PPG PR30B adhesive primer and PPG PR143 epoxy primer (aerospace undercoat for powder coat and paint). Zinc plate and clear passivate (to 5-25µm), spray painting, powder coating, screen printing, die-stamping, laser etching and engraving are among further services.

"Some of our competitors might be more cautious with Brexit looming on the horizon, but we are focused on the future of British manufacturing, continuing investment so that we keep attracting talented staff and maintain the growth of our business," concludes Mr Hall.

AMADA machines:

- LCG-3015AJ fibre laser with MPF load/unload system
- LC-2515 C1AJ laser/punch combination with RMP-3015N load/unload system
- HG 1003 ATC press brake
- VPSS Software Suite
- Production Designer software
- Blank CAM software