

N & J Aluminium Linings

CAD puts family business on the road to success

“Dealing with Made Smarter has been very easy and quick. I found everyone I have dealt with to be professional and friendly, and the process has really worked for us.”

Julia Buchanan,
N & J Aluminium Lining



An aluminium fabrication business has increased productivity and reduced wastage after investing in new technology with Made Smarter.

LN & J Aluminium Linings, based in Lancashire, engaged with Made Smarter to improve efficiency and win new client contracts. After implementing CAD technology, the family-run business in Clitheroe has increased revenue and grown staff levels to 22.

The Challenge

N & J Aluminium Linings has over 30 years' experience in aluminium fabrication. The team designs and manufactures a range of aluminium products from 4 x 4 vehicle accessories to hinged top covers, dog boxes, and bespoke storage boxes for both the commercial and leisure markets.

Set up in 2000 by Nick Buchanan, a weld fabricator, and his wife Julia, the family firm started out making aluminium linings for local Mitsubishi dealerships.

With demand high the business grew steadily, and organically, by expanding into two new units and investing in heavy equipment such as a Press-brake, Guillotine as well as more Tig Welding Plants.

Julia said: "We never went for a high-risk growth strategy and wouldn't borrow for the sake of borrowing. It has always been organic growth from the demand for our products.

"Working with aluminium lends itself to creating quite multi-purpose products so we have been able to diversify into several markets. We

supply into the farrier market, for example, and are also doing a lot of work for Scottish Woodland, as well as the core dealership work, which is great."

However, with new orders coming in which needed to be digitally catalogued the business decided it was time to consult Made Smarter.

The Solution

A Made Smarter technology adoption specialist worked with the business to identify the best solution to aid with the step-change into digitalisation. With the help of a £16,500 technology grant from Made Smarter N & J Aluminium Linings invested in computer-aided design technology (CAD). AutoCAD Inventor and Vault is an established CAD and PLM system, and they used a local North West supplier.

The government-backed grant paid for the hardware (computers and workstations) as well as the specific software needed to aid in the creation, modification, and optimisation of their aluminium products at design phase. It also covered training costs and the business was able to take on a new apprentice.

All N & J Aluminium Linings' designs are now drawn using CAD software and are sent to two local Laser profiling companies, in Burnley & Preston to be Laser-cut.

Julia explains: "Now we can provide the CAD drawings it means the cutting is exact. We then weld this when it comes back to us, and we know that everything is going to be a perfect fit."

The Benefits

Introducing CAD has had a very positive impact on the business – cutting down 80 hours of manual work a week.

The industrial digital technology has made N & J Aluminium Linings more effective, with less wastage, and the business can fulfill orders to a higher standard, with the ability to digitally catalogue all the parts required for an order.

There is also the added environmental benefit of cutting down on noise pollution. Alongside the grant funding Julia and a senior team member Sam Buchanan also benefited from free leadership and skills training through Made Smarter.

They took part in the Leading Digital Transformation programme which is delivered in partnership with Manchester Metropolitan University.

The programme brings like-minded business leaders together to provide the tools, ideas and leadership skills necessary to make the most of digital transformation opportunities.

The funded course is a mixture of online and face-to-face sessions which has been developed for senior leaders and managers and is designed to fit with the demands of a busy manufacturing SME.

Speaking of the course Julia added: "It was a great opportunity to learn more about digital transformation and we really enjoyed the visits to Amazon and PrintCity.

"I personally found it very interesting to engage with other companies and it gave you time out of the business to reflect on what's next.



By speaking with other Northwest manufacturers you soon realise that we all face similar challenges and it was useful to discuss these together."

The Future

The future looks bright for N & J Aluminium Linings and busy.

On the back of introducing new technology the business has already won two new big contracts and Julia describes Made Smarter as being 'instrumental' in those wins.

The manufacturer is continuing to grow revenues and is expanding the team with new hires on the horizon.

Julia said: "Dealing with Made Smarter has been very easy and quick. I found everyone I have dealt with to be professional and friendly, and the process has really worked for us."