

MADE SMARTER

Growth in turnover and happiness at Wrekin Sheetmetal

Wrekin Sheetmetal, based in Telford, manufactures and shapes a wide variety of steel parts and components for a great range of sectors, including healthcare, automotive, aerospace, retail, and much more.

While business had been going strong for the firm thanks to its diverse customer base and its strong reputation in the region, they were facing challenges with productivity and the overall cohesion of staff.

Initiatives like moving to a four-day week and putting in progressive mental health policies had improved productivity to an extent, but chokepoints in the manufacturing process meant there was still a lot of room for improvement.

Managing Director Claire Robinson was put in touch with Made Smarter West Midlands, whose experts conducted a value stream mapping exercise and recommended a new tablet-based shop floor system, which connects with all areas of the business, to reduce wasted time.

Claire applied for a match-funded grant of £20,000 through Made Smarter to help pay for the new system.

Wrekin Sheetmetal is now on track to more than double its turnover from two years ago, improve its profit margin and keep its staff motivated and happy.

Claire said: "Working with Made Smarter and having the new system in place has been invaluable for us.

"It's dramatically improved our production line process and has not only made staff happier, but has made it easier for us to onboard new colleagues and products thanks to the system's ease-of-use.

"We're confident this change will allow us to better hit both of our key goals at Wrekin Sheetmetal – to grow as a business and to be a happy place to work."

The Challenge

Wrekin Sheetmetal takes in steel in flat sheets, and passes them through various stages of pressing, forming, folding, cutting, and welding depending on the clients' specifications.

For the production line to run smoothly, data around machine performance and design changes must be communicated effectively between all relevant staff.

However, the various departments, such as engineering, sales, and the shop floor, could not see the same data simultaneously. Some information such as technical drawings had to be printed off and given to other staff by hand.

This resulted in situations where different departments would fall behind each other in the overall manufacturing process, causing undesirable bottlenecks.

In addition, Wrekin Sheetmetal found it difficult to manufacture wholly new products due to the length of time it would take to perfect a new manufacturing process for that product.

Claire said: "As the business grew, it was clear that old fashioned ways of working may have been fine when we were smaller, but not as we got bigger.

"Having key drawings still being printed on paper and handed to staff on the shop floor simply didn't work when you're juggling dozens of manufacturing processes all at once.

"Night shifts could be problematic too – data from that shift had to be recorded manually and updated the following morning, which was not ideal and could be prone to errors.

"What we needed was a proper in-depth look at our processes to work out exactly where improvements needed to be made and what new systems, if any, could give us the changes we needed at an affordable price.

"I got in touch with Telford and Wrekin Council to see if they could help, and they put me in touch with Made Smarter West Midlands. It all went from there."

The Solution

Claire was visited by Barry Jones, Digital Transformation Specialist for Made Smarter West Midlands, and Mani Ravikanta, Mechanical Engineer and lean manufacturing expert at WMG, part of the University of Warwick – strategic partners of Made Smarter.

Claire discussed the issues she was facing with the pair, who recommended an initial value stream mapping exercise, whereby a manufacturer's entire manufacturing process from start to finish is extensively audited and assessed for where improvements could be made.

Barry said: "While Claire knew bottlenecks existed in Wrekin Sheetmetal's processes, we felt a value stream exercise was the best way to forensically identify where the worst of the issues were and what the most cost-effective solutions would be.

"Businesses of all sorts of sizes often neglect to conduct these exercises simply because they feel their existing processes are adequate, and that it would be too disruptive to try and change.

"Often, this is far from the case. Exercises such as this, and the solutions discovered, pay for themselves incredibly quickly and can improve the long-term success of a business."

Made Smarter also assisted Claire with a match-funded grant application for £20,000 to pay for the exercise and any potential solution that came out of it.

"The application was a very smooth process thanks to Made Smarter's help," Claire added.

"Barry guided us through everything we needed to do and the funds were transferred into our account very quickly which meant we could get on with making the improvements we needed very quickly."

The Benefits

Following the value stream mapping exercise, Wrekin Sheetmetal was recommended to install a new real-time shop floor system using a network of tablets on every machine and in every department to monitor data.

Manikanta said: "Key data such as machine uptime and downtime, technical drawings, order information, and more is now instantly accessible to every member of the team, with information constantly updated in real time.

"The new system has meant the waste identified in our value stream mapping exercise, such as the time taken for the engineering team to pass on drawings to the shop floor team, has been virtually eliminated.

"It has also allowed more time to be devoted to manufacturing products, allowing Wrekin Sheetmetal to take on more work, while also enabling them to create processes for new products much more quickly thanks to all areas of the business being able to easily work together on it."

Claire said: "While we were happy to take on new products before the new system was in place, it would take a long time for us to get it right, increasing the wait time and the costs for the client. This sometimes made it difficult for us to win new work.

"With the new system in place, we can easily collaborate on a new process, refine it and get started on manufacturing much more quickly, which has unlocked new growth for us.

"And existing processes have been sped up too. We are on track to more than double our turnover compared to two years ago, which shows just how important this intervention has been."

While Wrekin Sheetmetal's bottom line is improving thanks to the new system, it is also positively affecting their staff.

"With the fluctuating nature of the manufacturing market at the moment, staff want to know they are secure in their job," Claire added.

"The new system clearly shows a full order book, so our staff can transparently see there's plenty of work for them in the near future.

"Not only that, once our staff bought into the new system, they realised it made their jobs that much easier by cutting out a lot of the unnecessary time-wastage that would sometimes occur.

"We have long believed that happy staff are the key to a successful company, so we're delighted the new system has had such a profound effect on our staff's wellbeing."

The Future

Now the new system is fully installed, Claire is hopeful of further improvements in digital connectivity across the business in the near future to enhance productivity and growth potential even more.

"We have started using messaging systems like Slack and monitoring systems like the V-Factory to further boost our connectivity, but there's more we can do," Claire added.

"We're a big believer in Industry 4.0 and having all aspects of a business completely connected, as well as conducting further value mapping exercises down the line so further issues can be spotted and rectified.

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From left: Claire Robinson, Manikanta Ravi and Barry Jones at Wrekin Sheetmetal's HQ in Telford, showing its new shop-floor software system

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