

Case Study

Automated laser cutter marks new era at Ernest Gill

Ernest Gill Manufacturing, a famous Yorkshire-based manufacturer with over 60 years' of trading history is using its continued success to invest in the latest sheet metal processing technology – a Trumpf TruLaser 3530 laser cutter with LiftMaster sheet handling equipment – enhancing the company's competitiveness even further.

Formed in 1945 Ernest Gill Manufacturing of Halifax has grown to become a 100-strong company with two main business streams. Firstly the family-owned company is a successful subcontract fabricator to the office furniture, heating, lighting and point of display industries. However, Ernest Gill is also an OEM, manufacturing its own range of office furniture for sister company 'Emergent Crown' that supplies both private and public sector customers.

Until recently Ernest Gill Manufacturing had processed most of its sheet requirements using a CNC coil processing line and turret punch presses, but these were failing to provide sufficient flexibility to meet both current and predicted demand.

"There was an obvious saving to be made by acquiring a laser cutter," explains Production Manager Simon Gill, the great grandson of the company's founder. "We could improve product design and enjoy other benefits such as reduce cycle times, remove non-value added finishing operations, less noise, less manual lifting and better material utilisation."

Having investigated a number of models, it was the Trumpf TruLaser 3530 that caught

the eye of Mr Gill. With gantry drives in X and Y, and a highly dynamic additional axis in the X (the X_p axis), all travel and positioning motions are carried out considerably more quickly, meaning that total machining times are reduced, a fact particularly marked when machining thin sheets with many contours.

Duly convinced, the TruLaser 3530 was installed in February 2007 – the company's first Trumpf machine – and already the benefits are being realised. "It is significantly quicker than our existing technology," confirms Mr Gill, "possibly twice as fast on thicker jobs. Also, there isn't any dressing or lifting requirements, both of which represent downtime."

Lifting has been eliminated thanks to the Trumpf LiftMaster, sheet handling equipment that is already paying dividends for Ernest Gill Manufacturing.

"The LiftMaster gives us extra capacity – the ability to run production 24 hours a day," he says. "To be honest many would see the laser cutter alone as a significant enough investment, but for us going a step further meant we could be even more competitive."

Ernest Gill has also invested in a non- Trumpf product to accompany the installation – a 17-station Swedish manufactured TIVOX tower store, a move that enables the company "to run as lean as possible".

Mr Gill is full of praise for Trumpf's assistance regarding product integration. "We've had fantastic support from Trumpf," he says. "TIVOX is not their product but they bent over backwards to ensure it was correctly interfaced. On the day the whole system was commissioned it ran unmanned until just after midnight – I was pretty impressed with that."



Ernest Gill processes mild steel, stainless steel and zintec parts in batches ranging from 100-1000 off, although the company will undertake prototype work for its larger customers, something it can now do more efficiently thanks to the minimal set-up requirements of the TruLaser 3530.

In terms of material utilisation Mr Gill estimates the new laser offers improved sheet material utilisation over its existing punch presses in the region of 20 per cent. With steel costing in the region of £400 per tonne, this represents a saving of £80 per tonne of material processed.

Ernest Gill is no stranger to ground-breaking investment – in 1974 it became only the second UK recipient of a robotic welding system, a move that created enough interest for Ford and one or two other automotive giants to come and investigate.

"Investment in the latest technology, to improve performance, is key to remaining competitive," concludes Mr Gill. "Also, we find we often get short-listed for contracts because of the plant we have. If you have large, flexible and fast machines, it certainly bodes well for securing orders."

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