

Flexible laser machine for diverse products

For more than 60 years engineering subcontractor Young & Wood of Harlow, Essex, has manufactured a varied range of components for architectural fittings, commercial buses and the banking industry. The company has recently installed a Synchrono laser cutting machine from Prima Industrie in order to keep production costs down and remain competitive.

"Versatility is a key requirement for us in providing solutions for customers," explains director John O'Rourke. "In the morning we could be producing bus components, and in the afternoon, banking trolleys. It was vital we invested in a machine that was not only able to handle the wide-ranging job specifications, but also offered speed, reliability and the highest cutting quality."

Young & Wood uses a range of materials between 1mm and 15mm thick in its production processes, including mild steels, stainless and aluminium, and, as such, was looking to source a machine that could cut both heavy and light gauge material to the standards required.

Six years ago the company added a Platino laser cutter from Prima to its machine set up, the majority of which are punching machines. Young & Wood typically profiled up to 15mm thick mild steel, 8mm stainless steel and 6mm aluminium sheet on the Platino, which provides 0.03mm cutting accuracy across its 3 x 1.5metre machining envelope. Superior dynamics enable head speeds of up to 140 m/min and accelerations of 12 m/s² to be achieved.

"The Platino's ability to pierce material in around 0.5 sec and cut at up to 6.5m/min has substantially reduced cycle times and increased our productivity, enabling us to minimise the effects of escalating raw material costs," explains John. "The machine's accuracy and repeatability has allowed us to manufacture a much wider range of products than is possible with our punching machine set up."

Impressed with the Platino's versatility and the high level of support and back-up from Prima, John decided to exchange it for a Synchrono in order to benefit from the further improvements to productivity and efficiency that it offered.

"Prima has always responded quickly when we have needed assistance and that is so important for us," he continues. "We had a



few teething problems to overcome, which is to be expected with a piece of kit newly introduced to the market. But it was the excellent service as much as the speed and accuracy we would get with the Synchrono which motivated us to invest in another Prima laser machine."

The Synchrono produces very fast processing times, enabling more than 1000 holes to be cut in one minute. While a job carried out on the punching machines typically took around 14 seconds to complete, Young & Wood has been able to achieve the same operation on the Synchrono in just 4 seconds (with N2) and 6 seconds (with air).

A major benefit for the company is the Synchrono's adjustable optics, which provide fast speeds and extreme precision, irrespective of the gauge of metal being machined.

"This feature really sold it to us in view of the wide range of materials and thicknesses we

deal with every day," continues John. "Synchrono's modular construction and versatility ensures we can machine all of our jobs with confidence and have the flexibility to meet future production requirements."

"We currently utilise a shuttle table, which, at the end of the day shift, automatically switches over two plates. This is sufficient to feed the machine to enable 'lights out' operation. However, we plan to install Prima's automatic Compact Server stacker/destacker in the near future. Controlled directly by the Synchrono, this will enable us to handle an increased volume of work overnight," he concludes.

Prima Industrie UK Ltd
Tel: 0844 499 6241
Email: sales@primauk.com
www.primaindustrie.co.uk