

# Cost-effective cutting

**Thompson Manufacturing's second Prima laser is supporting its cost-effective customer-led service strategy and delivering reliable unmanned production. *Machinery reports***

**L**ow-cost economies around the world continue to apply severe pressure on many of the UK's sub-contractors and fabricated component suppliers. But family-run Thompson Manufacturing is a company that is successfully fighting back against the tide of cheap imports with keener prices and shorter lead times, supported by its latest investment in laser cutting and automated work handling technology from Prima Industrie.

Formed in 1990, Thompson

Manufacturing & Engineering has established a strong reputation as a supplier to a wide range of industrial equipment and specialist automotive manufacturers, not to mention the entertainment sector – having produced walkways for the Millennium Dome, along with numerous fabrications for the staging of the Athens Olympics and the exhibition area at Jaguar's famous Browns Lane site in Coventry.

#### CUSTOMER SERVICE

"Our ability to win such high profile contracts is based on focusing clearly on customer service," says managing director Don Thompson. "That not only means aggressive

pricing to combat producers in India or China, but also short delivery lead times to compete against Eastern European suppliers. We are very much a service-led organisation and quite simply aim never to let our customers down."

A key weapon in the company's armoury is its investment in technology which includes a latest generation Prima 4 kW Platino CNC laser cutter, equipped with a CompactServer work handling system to enable lights out running.

This new capability dovetails perfectly with the company's core business strategy. "We are at our most competitive on relatively short runs, pilot batches or where the customer is looking for fast delivery," explains Mr Thompson.

"We purchased our first laser machine from Prima seven years ago, shortly after moving to our current premises in Shildon,

*Automation allows Thompson Manufacturing to run its latest Prima laser unmanned for up to 12 hours*





*The new 4 kW Prima laser machine supports the company's drive in other ways. Its accuracy and repeatability allow many of Thompson's fabrication jigs and fixtures to be made in house*

County Durham. Prima was then relatively new to the UK and our original 2.2 kW machine was one of its first flat-bed laser machines in the country.

"Although Prima was something of an unknown quantity, we were immediately struck by attention to detail. Their engineers are extremely knowledgeable – and took the time to teach us a great deal about fine-tuning the machine's capabilities to our requirements. Likewise, Prima's after sales and telephone support have proved to be equally impressive."

Thompson's early laser machine quickly established its credentials against the CNC plasma cutter already on site. It not only produced cleaner and more accurate profiles, but its operating costs were significantly less than the £1,000 bill run up by the plasma machine each month for consumables alone.

The confidence Thompson Manufacturing established through the performance of the Prima equipment and the customer support it received during the past seven years, put the Coventry-based supplier in pole position when it came to the company's latest investment. However, Mr Thompson and his colleagues still undertook a thorough evaluation of the latest equipment on the

market before placing their order.

"The fact that Prima equipment is attractively priced as well as reliable is a further bonus, because even a machine with a small price tag can prove to be the most expensive in the shop if it is not running," Mr Thompson says. "The key to this latest investment has been our confidence in the equipment's ability to run unattended."

The 4 kW laser enables material up to 20 mm thick to be profiled and the installation's CompactServer has a 3 tonne material capacity, typically enabling the Platino to run up to 12 hours without attention.

"As you can imagine, it allows us to eliminate significant overhead costs from our pricing calculations, while ensuring that the machine continues to make a contribution virtually 24 hours a day," Mr Thompson adds.

The new Prima machine is configured to automatically shut down once it runs out of material or has completed the required production run. It can also be monitored remotely by means of webcam and, according to the managing director, loaded with different gauge materials and programmed to produce a wide mix of components while operating unattended. The Platino and

CompactServer combination also features an in-built nesting capability which helps to ensure minimum sheet wastage.

"The new machine is definitely paying dividends," Mr Thompson underlines. "It provides us with a persuasive sales tool and has already been instrumental in winning a number of new contracts.

"It is also central to our ability to offer a next-day service on plain laser-cut components. Assuming we have suitable raw material in stock and receive the customer's DXF file by 10 am, we will guarantee to despatch the required parts by lunchtime the following day."

Responsiveness like this also accounts for Thompson Manufacturing's status as one of JCB Heavy Products Division's longest serving suppliers.

"JCB's requirements for relatively small batches on short lead times play to our strengths," continues Mr Thompson. "Just-in-Time is now the norm for us. So, everything we do is aimed at reducing set-up and lead times, minimising costs and de-skilling our production processes."

#### IN-HOUSE FIXTURES

The new Prima machine supports the company's drive in other ways. Its accuracy and repeatability allow many of Thompson's fabrication jigs and fixtures to be made in house. Likewise, the laser's flexibility and versatility enable it to be used for engraving or marking components for secondary operations such as welding, while also eliminating tooling costs on what might previously have been regarded as punch press jobs.

The Platino's granite base accounts for further operating benefits by providing excellent dynamic and thermal stability – for high speed, vibration-free cutting combined with maximum accuracy and repeatability.

According to Mr Thompson, the new laser machine and work handling combination will remain at the heart of his company's future operations. "I believe an automated paint plant may help us to capitalise on further opportunities," he adds. □