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# **TRUMPF** in Action

A digest of news and reports from TRUMPF Ltd

7/06



## Total competence in sheet metal

We are taking our largest stand ever at MACH to emphasise our total competence in sheet metal. Never before have we shown such a wide range of processes at an exhibition in the UK. Our stand will feature every element of the sheet metalworking production process from punching and laser cutting – or a combination of both – to bending, welding and marking.

The focus will be on repeatable accuracy and superior finish to remove the need for secondary operations and ensure good fit-up for subsequent processes. We'll demonstrate that quality costs no more and in the long term it pays substantial dividends by reducing production costs.



### Laserpunch

It's easy to see why we describe our TC6000L Laserpress as our flagship. This is the ideal machine for today's ever-shorter innovation cycles and variety of products. In addition to quality, reliability and productivity, the maximum flexibility of production machines has become an important criterion and one that the TC6000L demonstrates to the full. By combining laser and punching technology it can accomplish more and more complex machining tasks effectively and at high productivity rates.



### Punching

New at the show will be the Trumatic 1000 Rotation, a low-priced punching machine that's perfect for lower volume sheet metalworking. No other punching machine is as easy to install, operate and programme as the TC1000. It features a navigation system that transparently guides beginners through the programming process and into the use of the ToPs 300 basic software that allows more complex features to be added.

Despite being a low-end introduction to the TRUMATIC range, the TC1000 is no low-end performer. It can do everything a larger TRUMATIC can do including three-dimensional forming and tapping. It can also produce extrusions quickly, easily and economically in one machine set-up.



### Laser cutting

With the growing emphasis on third shift automation our flatbed laser exhibits will demonstrate affordable and reliable productivity. Automated systems that increase the speed and lower the cost of manufacture accounted for a large proportion of our growth last year, a trend that continues. Two solutions will feature on the stand, the Trumatic L2510 – demonstrated as an unmanned cell – and the Trumatic L3050.



### Bending

More bending space, superior accuracy and even higher productivity are the benefits of the TRUMPF new generation TrumaBend V Series press brakes. The use of new drives has reduced cycle times by up to 30%. Up and downstroke speeds are now 220mm/s. Accuracy is better by a factor of 2:1 and the range also benefits from a TRUMPF own dedicated interactive control.



For general bending applications where more advanced performance options are unnecessary we are introducing our brand new TrumaBend C66 press brake. It has been designed for maximum economy but this has been achieved without any compromise on quality and productivity. An independently programmable Y-axis, programmable CNC axes for backstop depth and height, self-centring upper tool, safe and easy backgauge finger adjustment are typical features that belie the TrumaBend C66's classification as a less-sophisticated press brake.



### Laser welding

Laser welding is superior to conventional welding in many ways, meeting more demanding requirements at lower costs. At MACH 2006 two systems will be demonstrating these benefits, the two sharing a common 2kW solid state laser. The first of these cells features a proprietary robot and will be welding stainless steel in a range of thicknesses to form a control box.

The other is a new standard laser-edge welding machine that is being shown for the first time at a UK exhibition. The TrumaWeld L1000 is designed to produce high quality linear seams without the need for time-consuming programming.

Very high positioning speeds achieved by programmable focusing optics will also be demonstrated in a special marking enclosure at the heart of which will be an HL124P pulsed solid state laser with a processing power of 120W.



### Marking

Our VectorMark® Laser Marking product programme now includes models with wavelengths in the IR range from 1064nm down to 532nm and 355nm. All are designed for easy programming and operation and available with a range of software options to suit a variety of marking tasks.

Two laser marking systems will feature at MACH. The VectorMark 'compact' 3 has a wavelength of 1064nm and produces excellent results across a large variety of materials. The VectorMark 'impact' 3 complements the compact product range and combines a high beam quality with an even greater performance. It is ideal for applications that require high performance and short cycle times such as deep engraving, annealing or IC marking processes.



Brian Lewis  
Managing Director  
TRUMPF Ltd.

Almost every sector of our manufacturing industry is facing stronger competition in today's global marketplace. To keep pace we must certainly adopt modern technology but is increased speed really the best way to make a part less expensive?

The simple answer is no. In order to achieve greater speed it may well have been necessary to increase the capital cost as well as running and maintenance costs. Slightly slower, consistent production with lower capital and running costs on the other hand will certainly lower piece part cost.

The belief that automation also ensures greater speed can also be wrong. Consistent production with known productivity values is indeed the key to lower unit costs.

TRUMPF will show a number of solutions at MACH. These include a laser cutting machine with low cost integrated automation and a brand new, competitively priced punching machine. This is able to do far more than simply punch. This means less manual intervention and, by the way, it has been designed to minimise set-up time too.

Please take the time to talk to us about reducing your production costs by choosing the best machine for the job. From start to finish, let us show you high quality production that may not necessarily be the fastest but is certainly the most cost effective.



METALWORKING PRODUCTION AWARDS 06  
IN ASSOCIATION WITH MACH & SUBCON

Best Subcontractor – Forming and Fabrication  
TRUMPF is delighted to sponsor this important award that recognises excellence in this important sector of our manufacturing industry



## Endless parts variety

With an average production quota of 25,000 parts per week Cash Bases, certainly needed a hungry punching machine. The company, with its main factory in the UK, and offices in France, Spain and Germany is the only manufacturer of custom cash drawers and high security cash handling solutions serving most of the world's best-known retailers.

As well as being highly productive the company's ultimate choice also had to be exceptionally flexible. Each of its customers is unique in its requirements. As well as providing the quality finish demanded by this aesthetics-conscious sector the chosen machine had to accommodate

more than 10,000 customer configurations that can vary in size, fixing hole and colour combination.

The answer for Cash Bases was a TC5000 Rotation. It is the high punching hit rate and axis acceleration of the TC5000 that make it so exceptionally productive.

"We needed the most reliable of machines with respect to uptime and one that required very little time to set-up," explained Peter Elliff, Group Operations Director. "The flexibility, punching speed, accuracy, good parts finish, quick programming and reduced set-up were the overriding factors in favour of the TC5000.

The parts produced on the TC5000 are mainly cases, trays and lids used in the construction of cash drawers, cash and note holders and a range of parts for operating mechanisms. Materials are mainly Zintec, CR4 and stainless steel.

"In addition to punching and profiling we are using the machine to produce dimples, joggles and loops," Peter Elliff continues. "And as we become more familiar with it we will certainly be exploiting its ability to form up to 25mm returns."

To enhance the intrinsic productivity of the TC5000, Cash Bases also specified TRUMPF's Trumatool 40 system. This allows the entire tool library to stored 'live' and therefore the automatic set-up and production of any dynamic nest from the total parts spectrum.

Without any interruption to production and in complete safety, new tools can be inserted and old tools removed for re-grind. No production time is wasted during tool exchange. Naturally Trumatool accepts all Multitools and forming tools providing Cash Bases with a phenomenal range of options.

The short set-up times of the TC5000, optimised by the Trumatool system is certainly having a positive impact on Cash Bases' relatively small batch production. Its typical batch size is only 37 and it produces 60 batches on average per week. "It is reducing our cost of manufacture considerably as well as giving us unprecedented flexibility," Peter Elliff concludes. "It is also allowing a step change in our manufacturing process enabling us to capitalise on the lean manufacturing initiatives already underway."

## Plugging the skills gap

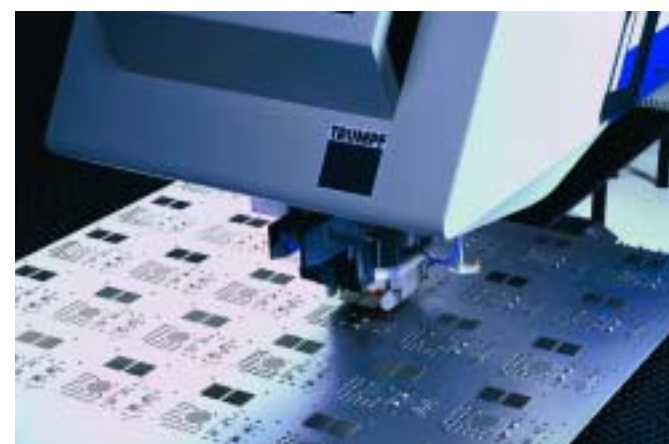


In common with all manufacturers investment in new technology by HM Prison Service is borne out of the desire to be cost competitive in the goods it produces. HMP Ranby is currently putting the finishing touches to a brand new production facility whose fabrication shop is equipped with the latest generation machinery including a TRUMPF TC 2000R punch press.

However, there is a more important factor in play here. The key roles of this metalworking facility are not only to provide high quality goods but also to provide training to ensure the prisoners achieve a skills level that will best equip them for work when they are released from prison. And this needs to be undertaken on the type of machinery that they will find in common use in outside industry.

The new fabrication centre has been designed as a one-stop-shop for furniture production. The intention is to provide prisoners with a thoroughly rounded experience of manufacturing where they can see the finished product and take pride in the part they play in its production.

HMP Ranby is seeking to tap into the substantial skills gap in local industry. "Companies are employing welders and machine operators from abroad and these are jobs that could be filled by well-trained ex-offenders," Industrial Manager David Bray comments. "There are tremendous opportunities for the semi-skilled and our training programmes are designed to meet that need."



This brand new, non-profit-making enterprise provides a starting point for a better future for prisoners and will be operational for two shifts per day providing skills training for eighty offenders.

## Greater reliability and uptime

Established in Sandbach in the early 1960s Newfield Fabrications prides itself on service, quality and cost competitiveness and has invested in modern machining technology to ensure these are not empty words. The company knows it operates in a highly competitive business and has recognised that in order to attract customers on price it has to offer greater speed and efficiency to keep unit costs down. Furthermore this has to be achieved without compromising accuracy and quality.

Investment in one of our L3050 flatbed lasers contributed a great deal to Newfield Fabrications meeting these aims. It provided greatly improved service reliability and reduced running costs by comparison with the company's existing laser machine. The TRUMPF machine immediately boosted productivity on a broad range of materials, mainly mild steel up to 20mm but also stainless steel and aluminium.

Less operator involvement proved to be another important benefit of the L3050 and a significant cost saver too. So in seeking to replace two more of its existing lasers the natural choice was the L3050. However the speed and efficiency of this model had proven itself to be of such high calibre that even though the two L3050 machines were a straight replacement for two existing lasers they have increased capacity by 33%.

"The choice of the second L3050 was easy," explained Managing Director, David Binns. "Good construction, small footprint, established in the marketplace and it had already proved itself to be better than the competition. The two machines are now centralised in one laser cutting area and, thanks to greater reliability and uptime, are run more efficiently."

The lasers are both equipped with automatic loading systems and several innovative techniques developed by TRUMPF to ensure the best machining results. These include the Process Control System that

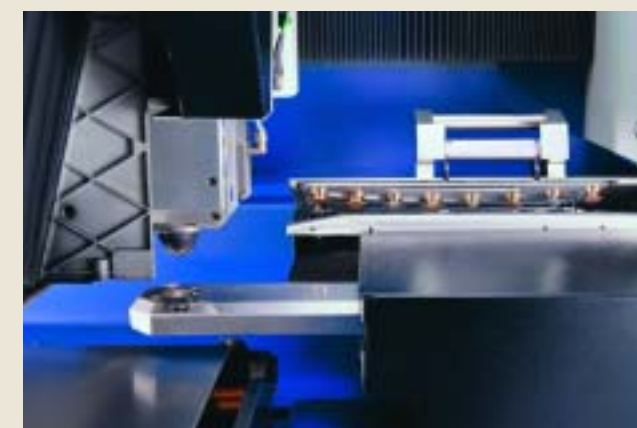


monitors and regulates piercing, SprintLas® for optimising thin sheet cutting and ContourLas® for cutting small holes in thick sheet.

Newfield Fabrications confirms that the L3050 has made a significant difference to its business. David Binns confirms, "We're saving on process and labour costs without losing quality and that in turn will allow us to maintain our core strengths."

## Auto exchange nozzle

To enable a wide range of materials to be processed with maximum speed and efficiency - and especially during unattended shifts - we have introduced a new automatic nozzle changer for our fleet of high production flatbed lasers. Its merits were recently proven in a trial that processed 20 jobs with a large variety of parts and materials with and then without the use of the new nozzle changer.



The outcome was significant. The new system saved more than 60 minutes of handling and waiting time - 60 minutes that could have been spent on producing more parts and therefore reducing unit costs.

The automatic nozzle changer can achieve these time savings as the operator does not have to wait until the programme ends to change the nozzle. Through the control system, this can be pre-set whilst the machine is in operation and by minimising operator-intervention handling errors are virtually eliminated. Higher process reliability and greater productivity are assured.

## FLEXIBLE MANUFACTURING TECHNOLOGY ... the proven strategy for Dudley Industries

Almost every sector of the UK's manufacturing industry is facing strong competition in today's global marketplace. To keep pace manufacturers must meet and even surpass ever-increasing standards of efficiency, flexibility and quality. **Dudley Industries**, Europe's leading designer and manufacturer of washroom dispensing systems is a good case in point.

In order to provide its customers with a service that provides innovative design, quality products and shorter lead times, it has consistently invested in modern flexible design and manufacturing technology. Above all this policy has enabled customer-led development of new products that is both rapid and transparent. It has also allowed the company to explore the use of different materials such as stainless steel, ABS, polypropylene, PET and acrylic, further extending choice.

This strategy has proved itself in Dudley Industries impressive growth record. In the last four years alone the company has grown by 75%. "As well as identifying potential customers where business opportunities could be actively developed we have also pinpointed suppliers that can support our strategy," explained General Manager and Director, John Shields. "And TRUMPF has been an important partner in that regard. Its machines are at the leading edge of technology, flexible in production, solid in construction and reliable in use."

Dudley Industries' TRUMPF machines include two TC2000 punching machines, an L2530 flatbed laser and four TrumaBend V-Series press brakes. Generally they are used in the forming and fabrication of stainless steel, aluminium, and mild steel up to 2mm. Batch sizes are from 1 to 1000. However the real star in John Shields opinion is the company's latest acquisition, the

Trumatic L2530 plus. The decision to invest in this enhanced version of the L2530 was easy thanks to the proven reliability and productivity of Dudley Industries' existing flatbed.

"We have been enjoying significant growth in our export sales," John Shields continues. "And the ability of our new L2530 plus to produce components at a much higher production rate has allowed us to improve lead times on small to medium batches and to lower unit costs."

The key element of the L2530 flatbed laser cutting machine is its integrated fourth axis. The plus in the machine's design is a low-mass secondary Y-axis motion unit that is integrated into the main Y-axis bridge. This allows higher acceleration of the cutting up to 1g/990 cms/sec<sup>2</sup>, considerably improving both part cycle time and percentage of 'beam on' time. As Dudley Industries demonstrates, productivity increases of up to 30% on intricate parts are easily achieved.

For some jobs Dudley Industries does use hard tooling but with trends towards short product life cycles, flexibility in production and design is becoming more and more important. John Shields continues, "the TRUMPF system with its quick set-up and high performance capability is ideal for current demand and an extremely flexible tool for new product development."

The TRUMPF machines continue to assist Dudley Industries in attracting significant orders from the highly competitive European market. "They have helped us achieve growth and secure our future by giving us the tools to support our customers' ever changing needs," John Shields concludes.



## New facility furnished with TRUMPF machines

As part of a strategy to create a production facility separate to its prototype shop, Coventry-based **DCM** has opened a new high productivity fabrication centre at Warwick. Forming the centrepiece of the new facility is a TRUMPF L2510 flatbed laser and two TrumaBend V500 CNC press brakes, which produce small batch production components on a rapid turnaround Kanban system for a number of high profile automotive OEM and Tier 1 companies.

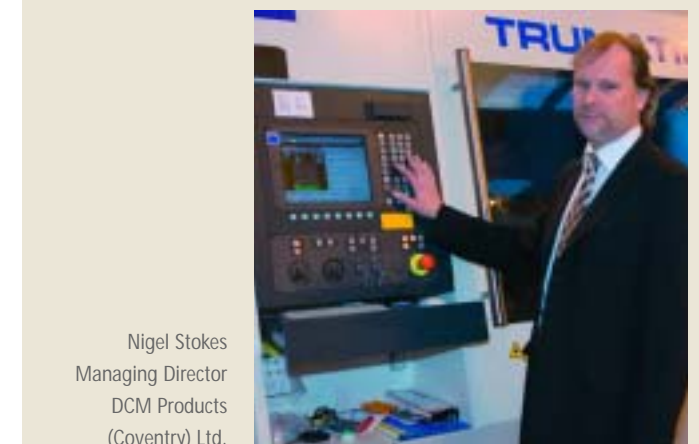
"We wanted to create a different philosophy at our new site," explains Managing Director Nigel Stokes, "one of lean manufacture and Kanban operation – hence the machines we selected were vital to its success."

Although DCM has been a TRUMPF user since the early 1980s, the company had a long look at the marketplace before making its final decision. "We certainly considered others but as always the price/quality ratio of TRUMPF won out."

DCM's new Warwick facility opened in January complete with an L2510 flatbed laser and two TrumaBend V500 press brakes. "Warwick is now our production centre," continues Mr Stokes. "All 14 staff at this facility are new recruits as we wanted to start with an open approach to the new methodology we were looking to impart."

Operating for automotive customers, as well as other clients in the aerospace, telecommunications and construction sectors, means DCM has had to gear up for Kanban deliveries. The company's prestigious clients supply an empty storage box to DCM once a week to be filled with components of the correct quality and quantity. Batch sizes are typically in the region of 25-50 a week – the largest batch is around 200. DCM processes parts ranging in thickness from 0.9 to 10mm, mostly from mild steel material.

"We have designed the whole process to be ultra lean," says Mr Stokes, "which means having flexible machines that can be set-up as quickly as possible – one of the key reasons we selected TRUMPF. The L2510 laser has a self-loader, which is one of the best purchases we have ever made – automation is absolutely crucial to compete with manufacturers based overseas in economies with a low cost base."



Nigel Stokes  
Managing Director  
DCM Products  
(Coventry) Ltd.

Formed nearly 50 years ago, DCM continues to be a leader in its field. The company's headquarters remain at Coventry, where 70 staff are based, although the facility only produces prototypes since the opening of the Warwick scheduled production centre.

Mr Stokes says that it is the balance of quality, flexibility and price that sets DCM apart from its competitors, as well as one other key factor: process repeatability. "When we load a program and press the start button we need to feel confident that the part will come off correct – we get that with TRUMPF."

## New business based on tube

There can be little dispute that **Llandaff Engineering's** purchase of a TRUMPF Tubematic laser process system has been a huge success. Part of a £1m investment programme the Tubematic has helped secure substantial new business in supplying seat frame products to a leading vehicle seat manufacturer.

"This product alone may require the processing of 30 tonnes of tube per week when it is in full production later this year," explains Business Development Manager, John Little. "And clearly the conventional production methods, drilling and piercing holes and saw cutting, are not cost-effective on this scale. Precision presswork and fabrication for the automotive industry is one of two new strings to Llandaff Engineering's bow,



complementing its core power distribution systems business. The company has also become involved in the development and production of an electrically-powered urban delivery vehicle. The Tubematic with 2kW laser and self-loading tube magazine is central to both strands of this new business.

The Tubematic's ability to handle simple rolled steel parts – such as the main chassis components for its electric vehicles – is one of the reasons cited by Llandaff Engineering for its choice. Lights-out working capability, favourable cost, technical support and machine availability were also important issues.

Although the current production parts both for the automotive seat frames and the chassis are all conventional cut tube products Llandaff Engineering is certainly looking to the wider scope of the machine in the future. "The combination of powerful CAD and the Tubematic's processing accuracy will enable us to engineer more cost efficient structures that save both weight and cost," adds John Little.

## Better design alternatives

With a fervent belief that UK-manufactured goods still do have a reputation for durable strength and good design, Bill Cardey of Preferred Tubes was determined that his tube processing business should uphold this tradition.

In Bill's opinion inferior, imported components do a disservice to the UK's office furniture manufacturing sector - Preferred Tubes principle market. Therefore with the ambition to offer its customers better design alternatives and speedier production times with less welding, fettling and grinding the company invested in a TRUMPF Tubematic tube-processing machine.

"The Tubematic has really helped our customers," MD Bill Cardey explains. "Our expertise and its ability have enabled us to solve complex design problems – not just function and aesthetics but process reliability and environmental concerns too."

Examples of these achievements include the perfection of folds on some thicker square and rectangular tubes. The substantial development work has resulted in the process being reduced from four welds to just one with a reduced need for secondary grinding.

"The Tubematic can handle our complete size spectrum," Bill Cardey continues. "And has allowed us to add stainless steel and aluminium to our capability. It really is a boon for handling last minute design changes."

The Tubematic chosen by Preferred Tubes has a 3.2kW laser and was supplied complete with automatic loading and unloading. The



machine has already been left to run through the night without any hitch.

In conclusion Bill Cardey's outlook is simple, "Keep the customer informed and when it comes to new design, get stuck in!" And thanks to the flexibility of its Tubematic Preferred Tubes can do just that, providing a 'best of British' service based on modern processing techniques.

## ToPS 1000 software keeps sheet metalworking operations trim

Having already purchased a TRUMPF L3030 flatbed laser with LIFTMASTER automation, **Hayter Ltd.**, one of the global leaders in grass cutting machine manufacture is set to become the UK's first user of ToPs 1000, TRUMPF's control and planning sheet metal fabrication software, helping move the company even further ahead of its competitors.

Hayter Ltd is a £26 million turnover, 200-employee organisation based at Bishop's Stortford in Hertfordshire. The company designs and manufactures both consumer (walk behind) and commercial (ride on) mowers. The latter are sold via an established network of dealers to customers such as local authorities and golf courses.

The story of the company's evolution is fascinating. Douglas Hayter established the company in 1946. A builder by profession he saw an opportunity to construct affordable temporary housing for soldiers returning from World War II. To do so he needed to clear land and thus set about building a nifty device made from little more than an old two-stroke motorcycle engine, a dustbin lid, some wheels and a sharpened blade attached to the crankshaft. Yet so accomplished and efficient was the end result that demand for the machine led Mr Hayter to rethink his career. The rest, as they say, is history.

Hayter was acquired by the US-based Toro group of companies in February 2005, a move that has led to a substantial injection of investment in the Bishop's Stortford facility. In September last year Hayter installed a TRUMPF L3030 flatbed laser with LIFTMASTER automation and ToPs 100 programming and nesting software. However, the company's existing MRP system was not uniform with Toro's corporate-wide SAP R3 system. Making the switch led Hayter to reconsider its own production control and planning software, deciding that investment in ToPs 1000 from TRUMPF would play a major role in driving further productivity improvements to build on the investment in the L3030 laser.

"The interface between the ToPs 1000 and the SAP R3 system is currently being developed," says Hayter's operations director, Raghu Das. "Once complete we will be the UK's first user of the system. It will allow us to command our machines directly from our business system – we will know exactly what jobs are complete and which ones are waiting. Our scheduling, prioritising and feedback systems will improve hugely."

ToPs 1000 from TRUMPF allows users to know at a single glance which machines and production jobs exist, as well as their current status, lending transparency to sheet metal fabrication. All TRUMPF machines and production jobs can be planned and controlled by ToPs 1000, which can communicate with PPS

systems, ToPs programming systems, machine controllers and storage systems. Production jobs can be scheduled based on the capacity available at individual work stations, while the modular structure of the software allows customers to configure the system scope to best meet specific requirements.

Mr Das says that one of the key reasons for selection was the level of feedback the system offers. "ToPs 1000 provides true two-way communications, a feature not offered by many other systems," he says. The software makes fully automatic machine feedback messages such as MDE, BDE and piece times, available for evaluation, as well as messages from the manual feedback systems.

"In just six months our new L3030 laser has replaced a punch press machine as well as £345,000 of annual outsourcing," concludes Mr Das. "When our ToPs 1000 system is configured in March 2006 we fully anticipate making even greater gains in productivity."





## Forming opinions about press brakes

With 25 years' experience of supplying fabrication services to blue chip OEMs in the automotive and yellow goods industries, Leicester-based B&P Fabrications Ltd recently made the decision to replace its existing array of press brakes with a selection of TrumaBend models from TRUMPF. The move has helped the company increase its performance and achieve commonality with a host of other TRUMPF machines already on site, making it one of the most advanced fabrication facilities in the Midlands.

While B&P's early years were spent processing thick materials for the pressure vessel sector, approximately 15 years ago the company saw an opportunity to diversify into thin sheet. Today the company can still process material up to 12mm thick, but 80 per cent of its work involves material of less than 3mm. It's a strategy that has helped B&P increase turnover to around £7 million, generated with the help of some 95 employees.

"The move towards thin sheet introduced the company to TRUMPF," explains joint owner, Pat Byrne. "At the time we looked at all the alternatives but from its reputation it was clear that TRUMPF was the market leader."

For flat sheet processing, B&P today has a strong portfolio of TRUMPF machines, including two Trumatic 5000 punch presses, a TC6000L laser/punch combination machine, as well as two dedicated flatbed laser profiling machines – an L2530 and an L3030.

However, until recently the company used press brakes manufactured by a TRUMPF competitor. Mr Byrne explains the reasons why B&P has now switched to TrumaBend models. "The particular press brakes we had were taken over by another company and, frankly, we didn't like the way the products were supported or the way that future designs were heading," he says. "For this reason we took the opportunity to look at one or two others. However, the strong relationship we had with TRUMPF made TrumaBend the favourite. We now have two TrumaBend press brakes and we've been so impressed that we have ordered a further two machines, scheduled for delivery in March 2006."

From simple parts through to intricate precision formed components, the hydraulic CNC press brakes from TRUMPF give shape to everything. The TrumaBend Series is synonymous with flexible and productive bending. The key to efficient bending lies not only in sophisticated machine technology and intelligent tooling systems but, above all, in the sensor technology. The angle sensor ACB (Automatically Controlled Bending) is a technique developed and patented by TRUMPF.

B&P Fabrications now has equipment valued at well over £2 million at its 5600 sq ft headquarters in Leicester, helping it process in excess of 500 tonnes of mild steel every month as well as several tonnes of non-ferrous material.

The TrumaBend press brakes at B&P are employed producing thin sheet components, such as covers, in batch sizes that range from 5 up to several hundred a week. Around 95 per cent of parts are manufactured from mild steel, although the company also processes materials such as stainless steel, aluminium, copper and brass. As well as fabrication services, B&P provides machining, welding, assembly and painting services. It all adds up to a complete service that the company says is vital to survive and prosper in a tough marketplace.

"Competition is fierce," says Mr Byrne, "and China is the biggest threat. Offering multi-service operations gives us an advantage but we must be competitive. If our prices are too high, our customers will go elsewhere, it's as simple as that. This is why we have invested so heavily in equipment such as the TRUMPF machines, which have provided this company with the impetus to compete on a global footing. We would have little chance of survival without TRUMPF technology."

## Colbree Precision

In just ten weeks following the Buncefield fire, subcontractor Colbree Precision is not only declaring 'business as usual' but is also fully operational in brand new and bigger premises. The fire removed the company's entire turning and milling capability. And although its sheet metalworking machines were salvaged they still required a lot of 'tlc' to return them to full working order.

Yet despite this devastation Colbree has managed to fulfil all its work commitments and remain true to its policy of continuously improving customer service by replacing old fire-damaged machines with modern machining technology.

Although originally established as a sheet metal jobshop, Colbree has steadily expanded its range of services. In addition to offering an exceptionally wide range of manufacturing processes Colbree now undertakes complete project management for its customers and has won a number of awards commending its competence.

Colbree's ability to cope in the immediate weeks after the fire was largely thanks to the support of suppliers, customers and even competitors. They provided the machining facilities for Colbree to continue its work.

Colbree's own Trumatic 2000 Rotation punching machine was transferred to our works in Luton for a complete strip-down. And in the intervening weeks it used our showroom TC 3000R to continue production. Other sheet metalwork was undertaken on TRUMPF machines installed at near-neighbour, Schroff-Pentair in Hemel Hempstead.

"Our sheet metalworking capability is fully back to normal and

we are just waiting on two more milling machines to complete our turning and milling section," confirmed General Manager, Rob Clark. But the new acquisitions don't stop there. Colbree has done more than replace machines it has invested in additional processes too. One of the new machines is a TrumaBend V-850S press brake and it has already been installed at Colbree's new Pitstone factory.



## PCD Limited

Described by Hertfordshire's Chief Fire Officer as possibly the largest incident of its kind in peacetime Europe, the Buncefield Oil Depot blaze in December last year wreaked havoc in the local community. Forty three people were injured, two seriously and more than 2,000 people evacuated from their homes. Businesses too were struck and among them PCD Limited.



On the face of it the loss of a manufacturing facility for a subcontractor such as PCD could be completely ruinous. However with the support of fellow traders, its insurance company and help from TRUMPF, PCD was up and running again within a matter of days.

With its building deemed unsafe, PCD was nevertheless given permission to remove its production equipment. The company's TRUMPF machines are seen as being central to its operation and to its main strength as a supplier of high quality parts. PCD has two punching machines, a fully automated TC5000 and a TC3000 as well as an L2530 flatbed laser. So salvaging these assets was a priority. However, apart from the company's powder-coating line, the resonator on the L2530 was the only equipment casualty and that too was quickly replaced, as was a new 3ft wide flat bed grainer.

Thanks to the swift work of insurers, PCD was found temporary accommodation within the nearby Acquascutum factory. "We were allowed back on site just four days after the fire," explained PCD's chairman Phil Cutts. "And within the week we had re-located the lion's share of our production facility. TRUMPF worked wonders for us."

Plans for PCD's new factory on the original site have been drawn up and the company hopes to move in by the end of November. In the meantime it is pretty much business as usual.

## Value-added marking

Laser marking may be a new facility for Laser Process in Cannock but early demand for the service is proving extremely encouraging. "Indeed I can certainly see this developing into a valid, self-supporting division of our company," explained MD, David Lindsey.

Laser Process is one of the UK's leading laser cutting subcontractors.

Founded in 1990 it has constantly maintained a range of the latest TRUMPF equipment as part of its commitment to modern machine shop technology.

The company's machine inventory includes several of TRUMPF's CO<sub>2</sub> systems and indeed these have been used for marking in the past, "Although it really was a case of taking a sledgehammer to crack a walnut," explained David Lindsey. "Sometimes there is no alternative, for example where bend lines need to be incorporated on a blank. But, for conventional marking there is no comparison to a dedicated facility."

Such a machine has been on David Lindsey's wish-list for many years but it's only in recent months that he felt the time was right to make the purchase. However, when he did there was no doubt in his mind which brand to choose. "We have used TRUMPF machines exclusively for a number of years, I simply didn't feel the need to look elsewhere."

The marker David Lindsey selected is a VectorMark 'compact' 5 with a 1064 wavelength, one of the two models we'll be showing at MACH 2006. It is designed to suit a wide range of marking needs, a factor that is proving important to Laser Process as it seeks to secure specific work for this latest addition.

Product and brand identification has been the main role of the VMc5 since its installation late last year. However its scope is certain to be put to the test in the coming months. "We attended the Autosport International Show in January," David Lindsey adds. "And the interest in our marking service was phenomenal."

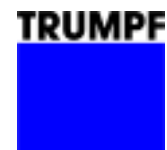
## Eliminating non-essential machining

Albon Engineering and Manufacturing plc doesn't deny that serial and data matrix information can be successfully marked onto the machined surfaces of its connecting rods using pin stamp technology. However in this highly competitive market the machining of non-functional surfaces carries a cost that can and must be avoided. The company's investment in a TRUMPF

VectorMark laser marking machine has allowed this data to be directly marked onto the forged surface helping to rationalise production costs.

"To obtain high accuracy and definition we needed a YAG-based system," explained Product Development Manager, Rob Harris. "We needed a high powered laser to achieve the cycle time to match the throughput volume of the conn-rod line. Although not the cheapest, the Vectormark met this need well whilst retaining the finesse to produce the data matrix."

With the emphasis on minimal downtime, the reliability of the VectorMark is of course very important to Albon Engineering and Manufacturing.



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