

History with a future

It's been just over 18 months since machine tool makers Jones & Shipman International and Holroyd Machine Tools became part of Precision Technologies Group (PTG). Andrew Allcock offers this update

Some 17,000 of the iconic Jones & Shipman 540 surface grinders had been supplied worldwide when the company history, *Tools that built a business*, was published in 1972. Today when I 'Googled' "Jones & Shipman 540", I got over 8,000 returns. That is the power of the globally recognised brand. There remain many 540s still in use today – and, although are no longer made, the spirit of the original design is still evident in the latest 524 Easy surface grinders.

In contrast, the Holroyd brand is not so widely known, although the company is a world leader in compressor rotor component manufacture, and in producing machines to mill and grind helical forms, gears and threads.

Edgetek, a brand within the previously Renold plc-owned machine tool activities of Jones & Shipman and Holroyd, inhabits a smaller niche than its sister brands. Its focus is superabrasive 'HEDG' (high efficiency deep grinding) machining of, typically, aerospace alloys, with a heavy emphasis on turbine blade forms and automotive parts.

ABOVE THE LINE BRAND

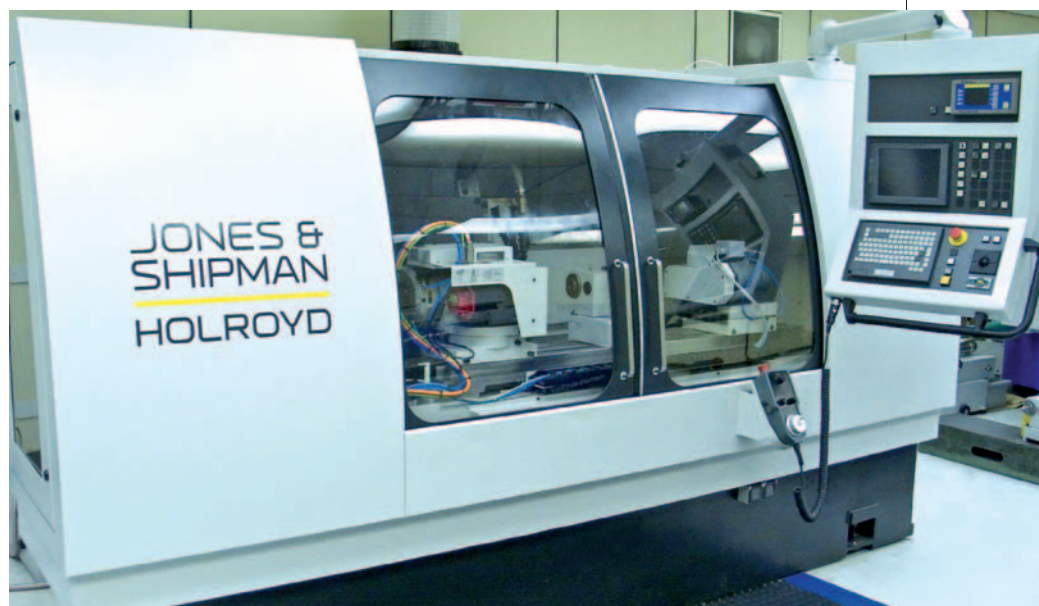
This explains why at the recent MACH 2008 exhibition Jones & Shipman was the lead brand; a fact reflected in the new livery unveiled at the event. In the case of the Jones & Shipman Ultramat cylindrical grinder, for example, 'Jones & Shipman' appears above a horizontal yellow line and 'Holroyd' below. This new livery will also be phased in across the Holroyd range of milling and grinding machines and the Edgetek superabrasive systems. And, as other companies are acquired by

PTG, they will also find their place 'below the line', offers Group managing director Tony Bannan, who re-joined the business in September last year.

Brands apart, the two machine tool operations have, in fact, been renamed – Holroyd Precision and Jones & Shipman Precision – while the rotor component, precision gear and screw form manufacturing operation is now called Precision Components (previously Holroyd's sub-contract components supply business). The latter is a world leader in its field and complements the machine tools business activities in that it makes rotor and precision screw components for companies that then go on to buy a Holroyd machine, or provides interim production prior to the delivery of an ordered machine tool. Machine

Tools and Precision Components are effectively two separate divisions within PTG, whose activities continue to span two sites – Jones & Shipman Precision being at Leicester, and Holroyd Precision and Precision Components located at Milnrow, Rochdale.

So, new livery and name changes; what else has been happening over these past 18 months? The organisation has changed most visibly in an operational management structure sense, while the strategy remains the same: "We have high ambition and expectation but the objectives, goals and product strategy remain broadly similar to those initially set out following the change of ownership," confirms Dr Bannan. And that overall product strategy for the machine tool activity is the design and



The new livery – Jones & Shipman in top position on an Ultramat grinder

manufacture of specialist precision machine tools, and that means: "Special, not run-of-the-mill products that you can get off the shelf from five other businesses. We have two or three main competitors for each brand and, of course, we keep a close eye on the markets to watch and understand what's emerging."

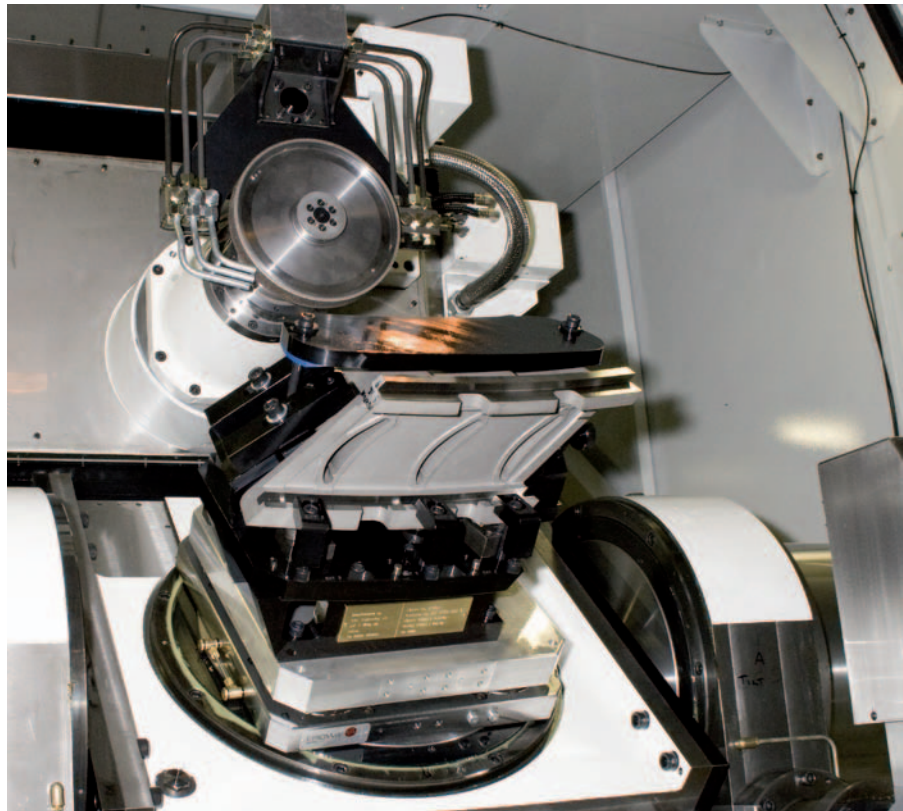
MANAGING PRECISION

Management changes include the establishment of a single managing director post across both machine tool operations – Dr Bannan – but each site also has an operations director, while Precision Components is headed up by general manager Colin Carr.

Each location now has a focused machine tool R&D team, but work is shared between departments as demand dictates, while the two managers work closely. "We are giving R&D more focus than we have ever done and we have a range of new products coming through," says the group managing director.

The machine tool sales organisation has been the focus of much effort and thinking over the last few months, he adds, with each sales individual having a Group perspective and geographical responsibility. So Mike Jollands is responsible for all machine tool products in the UK and Europe. In a similar vein, Steven Benn covers East Asia; Bob Biggs covers India and the rest of the world, while Mike Duignan, as sales director, heads up the sales operation and also covers North America and Canada.

In terms of international presence, currently there are two overseas centres for the machine tool operations, one in Lyon, France, and another in Connecticut, USA – each covering distribution, sales and service, plus some applications engineering. But there is increasing activity and interest, generally, for both the components and machine tools businesses overseas. This includes the setting up of a dedicated support and service centre in Shanghai, staffed by the company's employees, with further recruitment underway.



Edgetek technology is focused on HEDG and on turbine blade type parts in particular

The Group is currently also engaged in discussions about the setting up of an 'on the doorstep' Precision Components operation in China, while it is also exploring the local manufacture of machine parts and sub-assemblies to serve Asian markets. In all cases, the company is clear that it wants to control the critical operations and retain core intellectual property.

Published figures indicate that China consumed approximately 23 per cent of the world's machine tools in 2007. "No serious machine tool business can ignore this trend," confirms Dr Bannan.

JONES & SHIPMAN STRATEGY

The Jones & Shipman product strategy is twin tracked – engineered applications based on the Ultramat cylindrical platform and the Dominator creep-feed machine and standard, out-of-the-box units sold through distributors, such as

the Suprema cylindrical 'Easy' range and 524/624, and Techmaster surface/profile grinders with semi or full CNC control.

Interestingly, there are Holroyd customers looking at heavy duty versions of the Ultramat for rotor grinding applications – a reflection of its rigid construction and design, as this is not an application tackled by many precision cylindrical grinder makers, according to Dr Bannan. And the company is processing machines specifically for heavy rotor grinding applications.

However, the main focus for development at Jones & Shipman is a new cylindrical grinding machine to update the existing Ultramat system. The new machine will have larger capacity and different centre height, and it will be faster and more configurable in terms of wheelhead. It will also offer increased process capability (the automotive industry often now asks for Cpk 2), and



Jones & Shipman/Holroyd presented its new image at the recent MACH 2008 exhibition

will feature new control modules to better support thread and out-of-round grinding. A more modular build will reduce lead-time and increase versatility. The emphasis is higher productivity and configurability for end-users.

Moving to Holroyd, the big growth area over the last year has been in compressor rotors, primarily for air conditioning and refrigeration, and driving demand for both milling systems and grinding machines.

"Holroyd is established as leading in milling of precision rotors and specialised forms and is driving real technological development of its high performance profile grinding machines, for which the company won the Queen's Award for Enterprise: Innovation, in 2004," explains Dr Bannan.

"The Holroyd order book is bigger than it has ever been, having increased by approximately 300 per cent over the last 18 months. Enquiries are strong, too. But we see the growth opportunity as being precision gear grinding; these being in

emerging markets such as wind power," he explains.

Indeed, partnerships are actively being pursued with wind turbine gearbox manufacturers, although most of this business is in Europe, and PTG is prepared to commit substantial funds to develop a machine tool to tackle larger gears, Dr Bannan reveals. The company's GTG2 gear grinder or the TG350 rotor grinder currently tackle components up to 350 mm diameter, for example. And here, work is under way to add additional features to provide further application scope and versatility and the production of more forms.

HIGH VOLUME DEVELOPMENT

In addition to its gears business developments, Holroyd is strong in applications featuring high versatility, low batch quantities and high variability. It is penetrating markets with its TG150 and TG350 machines which are now being developed with the option of using superabrasive wheels for high volume

production duties (2,000 rotor sets would be considered high volume).

But one particularly noteworthy current development is the design and manufacture of the '8EX' large rotor-milling machine. To be delivered this November to a Japanese company, the rotors produced will be up to 900 mm diameter. Precision Components has produced pilot batches of rotors while the machine is being built. Destined for use in the production of rotors for long distance gas transmission pumps, this one machine order is valued at £2.4 million – and the company has enquiries for larger, similar machines. This milling machine is fitted with a Fanuc control; Holroyd Precision and Jones & Shipman have forged strong partnerships with Fanuc UK and Europe, and a number of other developments are in progress, it is reported.

In the Edgetek superabrasive machines area, the latest model is the SAM XL which includes milling and drilling capability plus a 40-position toolchanger. And when changing wheelsets or tools, these are exchanged along with the coolant nozzle system, eliminating any need for manual adjustment, as used to be the case. Huge cycle time reductions and efficiency gains are being achieved with these machines, with a number installed in USA and scheduled for commissioning in Japan.

But Dr Bannan is also keen to underline the customer service side of the business. "It is one of the strengths of Jones & Shipman: we get good feedback and we are placing a lot of emphasis on it. I believe we must offer a high quality, retail-type customer service experience. One customer service telephone number, under the watchful care of a single senior customer service manager, will ensure all calls are channelled to the right place in the business, in a timely fashion."

The PTG businesses are profitable and this year turnover is forecast to grow by 30 per cent. Just 18 months in, two historic UK brands seem poised to move forward more aggressively than they have for some time. □