

# Hardinge + Bridgeport = ?

**What is Hardinge doing with Bridgeport? It's a question that Hardinge in the UK continually has to answer these days. Andrew Allcock heard the answer**

US-headquartered machine tool builder Hardinge Inc acquired Bridgeport intellectual property and certain assets on 3 November last year (see page 32). In the UK, Hardinge initially took on 51 Bridgeport employees, with an emphasis on sales and service operations, but the UK Hardinge-Bridgeport contingent has actually increased to almost 70 employees today, underlines Hardinge Machine Tools Ltd's managing director, Bob Duxbury.

Bridgeport is now the brand name under which all Hardinge machining centres will sit, with the centre of Hardinge-Bridgeport operations in the UK remaining in Leicester. However, a complete break has been made with the past with a move to a new location on the Whetstone Industrial Park in March. This 40,000 ft<sup>2</sup> location has been upgraded following an investment of £0.75 million and now houses product development, machine assembly/customisation, sales, applications engineering and service operations. In fact, Leicester now has responsibility for all milling product R&D for the Hardinge Group and is the global operational centre for sales, spares and service for milling products.

The Hardinge Group employs 1,500 of which 120 are now located in the UK. The combined UK Exeter and Leicester operations now claim 14 internal and six external sales engineers, eight application engineers, 17 employees involved in assembly, customisation and turnkey solutions, and there is a team of 34 supporting the service effort, five of which back "hotline" technical support.

The purchase of Bridgeport by Hardinge is, in fact, a testament to what

the previous Bridgeport management and product development teams had achieved, Mr Duxbury offers. Chicago's International Manufacturing Technology Show (IMTS) last September highlighted that. So Hardinge has supported the product development and manufacturing strategy that was already in place.

UK-based manufacture had already been recognised as untenable in the long-term by Bridgeport, while partnering with outside companies for specific technological elements had begun – most notably with SKF for spindle development. The company had, prior to the Hardinge purchase, already established manufacturing partnerships with

Machine Tools and Strathclyde Machine Tools, both of Taiwan. Hardinge itself already has a 51 per cent shareholding in a manufacturing operation in Taiwan – Hardinge Taiwan Precision Machinery.

IMTS revealed brand new designed-for-outsource manufacture Bridgeport machines – the VMC 600/760/1000XP3 verticals; the vertical Interact 450 (now the VMC450P3 – Siemens, shopfloor programmed unit); and the HMC700, 500 mm pallet horizontal.

The existing FGC 2 Viper grinding machine (below) carcass also hails from Taiwan (with all of the grinding process





equipment fitted in the UK), as do the 5AX trunnion/rotary table 5-axis machine, the VMC1500VXP3, the HSC500 high-speed vertical and the APC1000S vertical units.

However, it is not Hardinge's intention to be a provider of lowest price machine tools, Mr Duxbury stressed, but rather affordable machine tools with no compromise on quality.

Hardinge Machine Tools Ltd's sales and marketing director, David Andrew, adds to this by saying that the company does not believe in the old buyer/supplier relationship. The supply of production solutions that deliver an advantage to make its customers more competitive and profitable is the focus.

#### CONTROL NOT LOCATION

For those with reservations about the actual place of manufacture, this is not the critical element, rather it is how you control quality, offers John McTernan, director – Bridgeport brand, and previously Bridgeport sales and marketing director.

Hardinge has been an implementer of Total Quality since 1987 and has long had a Reliability Committee that targets any product issues. "Hardinge sets the standard for product reliability in the machine tool industry," is the boast.

The Bridgeport XP3 range is in keeping with this philosophy. The company claims that Taiwan manufacture allows the cost-effective delivery of a host of standard features that would be considered options on other manufacturers' machines.

The major XP3 innovation is its construction. Stiffness and vibration

reduction are major themes, while machine geometries are typically two times better than those called for by ISO standards. And the German-built SKF spindle offers face-and-taper contact which is significantly stiffer than competing machines.

The forthcoming EMO exhibition in Hanover (14-21 September) will see further machine tool product launches; a larger, 630 mm pallet horizontal machine, for example; while an advanced production centre, a travelling-column pallet changing machine, APC600, will also appear in the third quarter, adds Mr McTernan. A new 5-axis machine is also projected.

Meanwhile Leicester is involved in integrating its Heidenhain CNC expertise into essentially Hardinge machines for a new range also to be seen at EMO. But the flow of expertise is not just one way. Machining centre development will draw on Hardinge Group technology in due course, specifically in the area of hydrostatic guideways from the Hardinge stable and from grinding company Kellenberger in the case of hydrostatic spindles, while Kellenberger is interested in the Viper grinding process delivered with the Hardinge-Bridgeport FGC 2 machine. Cross-fertilisation between the various technologies within the group is clearly on the cards.

#### Hardinge – a global company

Hardinge Inc has over 800,000 ft<sup>2</sup> of manufacturing capacity at its operations in the United States, Switzerland, Taiwan and China.

In addition to turning, milling and workholding products, the group includes grinding machine brands Tschudin, Kellenberger, Tripet, and Hauser.

But more fundamentally, it is the first time in many years that the development of the Bridgeport brand has rested with a machine tool company rather than with a venture capitalist, and this is something that Mr Duxbury emphasises.

"We are a machine tool company not a venture capitalist. We understand the industry, market demands and how economies of scale can influence a business and more importantly, as time will demonstrate, that product development with a strong customer support strategy is key to moving the business forward." □

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#### Bridgeport purchase particulars

\$232 million turnover Hardinge Machine Tools Inc purchased Bridgeport intellectual property rights and assets worth \$7.25 million, along with \$4.1 million worth of finished products from publicly traded buyout and mezzanine fund American Capital Strategies.

Included in the purchase were the Bridgeport name, trademarks, copyrights, designs, patents, know-how, and all other intangibles associated with Bridgeport's machine tool business throughout the world, with the exception of the Bridgeport knee mill business, the rights to which Hardinge acquired under a previous licensing agreement announced in September 2002.

Since the latest purchase, Mr Duxbury says that Hardinge has probably invested somewhere in the region of a further \$11 million in Bridgeport operations.

Expectations for Bridgeport brand product sales are \$50 million for this calendar year. In the UK, Hardinge expects to ship 300 machine tool units (all types of machine) overall this year, up from 120 in 2004, 90 in 2003 and around 65 in 2002.