A century's experience leads to the Millennium

A venerable British machine tool name is emerging as a potential world force again, although the headcount for the UK-based company is limited and will stay that way, as Andy Allcock discovers when he visited Webster & Bennett in Coventry.

Following its appearance at MACH 96 and an in-house show, Webster & Bennett, a machine tool builder with a 100-year product history, already has a growing order book for its new Millennium vertical turning lathes (VTLs) — sophisticated turning/boring or turning/boring/machining units. Managing director and 50 per cent shareholder Iain Exeter revealed this during a second Millennium-focused open house at the Coventry company's headquarters in mid-August.

This open house was, in fact, the last chance to see the first Millennium machine before it goes to the US, where it will be the centrepiece at another open house. It was undergoing c axis and live tooling trials this time, complementing the turning trials already successfully undertaken, the results of which were being replayed on video for the cognoscenti.

Following its arrival in the US, this 1600 mm table Millennium will be on show at the Simmons Machine Tool Corporation, which makes machinery for the manufacture of large railway components and has, since earlier this year, had a license to build Millenniums for the US. Incidentally, Simmons now also owns the former East German Niles lathe business, now housed in a new factory in Chemnitz, Germany, and Webster & Bennett is the sole UK agent for Niles-Simmons lathes as of earlier this year.

Above: The dawn of the new Millennium on Webster & Bennett's stand at MACH 96

Below left: A demonstration of the virtues of c-axis control at Webster & Bennett's August open house

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Above: The very first Millennium in build at Webster & Bennett's Coventry factory

After the Simmons' Millennium, a second Millennium is now on Webster & Bennett's small assembly floor, due to go to South Africa, while a third will go to Scotland, a fourth to France, with another then due to go to Wales. In South Africa, however, Iain Exeter is already discussing the possibility of having Millenniums made by the company that currently rebuilds Webster & Bennett machines there. This is the route intended for future expansion of product sales for the company, the other half of which is owned by SA Muller Machines, Europe's largest distributor of precision machine tools. In the US, there is probably capacity to manufacture 15 Millenniums a year, and in the UK, capacity is around 12 a year, although the product mix will affect this.

MAXIMUM DENSITY

The 50-plus-employee company has reached maximum density in the UK, says Iain Exeter, although had government been more supportive, it could have gone to three times this, he believes. He is still piqued by the lack of government support during his time at multispindle maker Wickman Machine Tool Manufacturing Company, which also incorporated the Webster & Bennett product line. Cashflow problems and the government's delay in granting export licences for an Iranian order were at the root of that company's failure in the early 1990s, he says. And he draws a contrast between this country's lack of support for the machine tool industry and other countries' approaches, and is clearly upset at the potential lost with the failure of that company — potential upon which others are now capitalising.

Nevertheless, Iain Exeter has built the new Webster & Bennett company up to its present size from only nine people in just over three years, eschewing possible government help due to its bureaucratic nature and long lead time, and clearly sees it as a company with a successful long-term future. He aims to take a "significant slice" of the top end of the VTL market with Webster & Bennett machines — the world market being some 30 to 40 turning/boring/machining units and around 70 turning/boring units. And he is eager to target those customers who are undecided and compete against the other VTL suppliers rather than just settle for servicing existing Webster & Bennett machines and undertaking rebuild work. Iain Exeter believes new machine sales to be less prone to the vagaries of the general business cycle, purchases of new large machines being linked to long-term plans. So new machine sales are the Coventry company's priority, with everything else set to take second place. In fact, it is intended in the near future to split the rebuilding work from new machine assembly by finding another site for the rebuilding side of the business.

PORTFOLIO POSITIONED

The Millennium is the company's offering at the heavy-duty and top end of the VTL sophistication scale. This machine is the brainchild of Dave Matthie, a designer with a long history with Webster & Bennett machines, whose ideas have been incorporated into the machine. Its heavy construction supports the availability of various heights. A particularly novel item is the optional rotary swarf conveyor that surrounds the turntable and which deposits swarf into a linear system. Another feature is the use of hydraulic cylinders to move the cross-rail up and down. The company is also expecting to get an order for a machine with a split turntable with either 2 m or 1 m diameter active. This allows for 350 revs/min when operated in the 2 m mode and 700 revs/min in its 1 m mode, and it only costs an extra £30 000. This approach is good for machines of 2 m and above, says Iain Exeter, although above 2 m machines are not part of the standard range. Orders for machines with 3 m and 4 m tables are imminent, nonetheless, although the 4 m one is for the US and will be built by Simmons. All in all, though, the Millennium is special: novel features apart, it is the first all-new Webster & Bennett machine that has been developed since the S series was introduced some 25 years ago!

At the lower end of the VTL market, which numbers 100s and also takes in rebuilds, the company is offering Titan VTLs, which are based on Romanian castings shipped to the UK and modified to Webster & Bennett designs and fitted with modern electrics, hydraulics and CNC. The 1450 mm turntable diameter machine

MACHINE TOOL SELECTOR
The Global Machine Tool Specification System

With version one of Machine Tool Selector, the CD-ROM-based global machine tool specification system, now available, various additions are planned for version two, which is due out in January 1997. A joint venture between *Machinery* in the UK and *Modern Machine Shop* in the US, the next update of the Selector will, for example, include an additional category for horizontal and vertical boring machines.
If you are not already a subscriber, you can call MTS Sales on 01322 222222.

comes in at £175 000, while the 1200, 2000 and 2500 mm turntable machines all feature a five-station turret.

ANY OLD IRON

In between these two extremes of product, Webster & Bennett has offered its Flexidrive. More a concept than a single machine, this has seen old Webster & Bennett 'iron' used to support the delivery of CNC machines of varying sophistication and with tables of 36, 48 and 72 inch diameter. These revamped machines use either the customer's machines or Webster & Bennett sourced iron, but the latter activity is to cease in favour of the new Millennium F series. The F series is really a normal-duty machine in contrast to the heavy-duty Millennium range, as it does not have to support a variety of heights. The first F series machine will make its appearance during the middle of next year.

With some 10 000 Webster & Bennett machines claimed to have been supplied, clearly the new company and its associates will only add slowly to this by proportion — a fact of life given increased machine productivity and less heavy engineering. Nevertheless, the re-emergence of an old and respected British machine tool name with an openly competitive focus on new machine development and worldwide sales is refreshing. ❑

Millennium range

In its simplest form, the tool-changing Millennium range breaks into four standard table size ranges and two technology levels. The four table sizes are 1000 mm diameter with 1750 swing, 1250 mm diameter with 1750 mm swing, 1600 mm with 2200 mm swing; and the 2000 mm machine with 2500 mm swing. The technology levels in each are plain turning/boring or turning/boring/machining supported by live tool spindle and c axis control. On top of this basic description are then placed options such as different main motor power of 50 kW or 75 kW, different heights — standard, tall and extra tall — plus automation options such as pallet loading. The 2 m machine can also accommodate 45 tonnes on the table. In the Millennium F series there are the same two technology levels, but there are three standard table sizes of 900, 1200 and 1750 mm. For all standard machines, it is intended that castings will be available in advance of orders so as support good delivery times.

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WEBSTER & BENNETT LIMITED

Machine Tool Builder in Coventry since 1887

FLEXIDRIVE

TITAN

MILLENNIUM

The world's premier builder of Vertical Turning Lathes. More then 10,000 delivered -

- **2280 machines in the 1960's**
- **1418 machines in the 1970's**
- **266 machines (mainly NC & CNC) - 1980-85**

In 1985 Wickman sold the Webster & Bennett factory and moved the company into the Wickman factory. Only 45 machines were sold during the next seven years until, Wickman was placed in receivership in September 1992.

In December 1992 the Webster & Bennett business was acquired by SA Muller Machines of Bienne, Switzerland.

Whilst a new machine was designed and a suitable factory was acquired the company built up its resources through the rapid growth of the spares and rebuild business. The first new design was the FLEXIDRIVE range. This was followed in 1996 with the MILLENNIUM and TITAN ranges.

In 1996 18 machines were built.

In 1997 31 CNC and 2 conventional machines will be built.

In 1998 we expect to be at full capacity producing 15 MILLENNIUM machines and 30 other CNC models.

"Success does not come easily especially for a second time, but it's here now and it's sweet"

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