

Benefits of local supply

Return of work from Asia and Eastern Europe prompts investment in four new mill-turn machines

Preparations for continued growth in 2012 have seen a South Coast-based precision sub-contract machining company add three CNC sliding-head turn-mill lathes and a fixed-head turn-mill machine to its portfolio of 48 machine tools.

The investment – structured to keep the high-technology machining side of the business right up-to-date – should help to maintain the momentum generated by an increasing order book of component and sub-assembly supply to customers in the automotive, medical, aerospace, brewing, white goods, fluid power, defence and telecoms sectors.



Brian Owen, managing director of Precision Products (Brighton) Ltd, is adamant that his business's ability to benefit from what he defines as "maximising the advantage from import substitution through UK production" is attributable to the focus on continuous investment and the ability to retain skilled machinists: three of the latter have over 30 years' experience, while eight have 25 years of service with the company, which has also expanded its apprenticeship scheme to help compensate for the dearth of skilled labour in the area.

Mr Owen recalls how many OEMs – and even some sub-contract companies – climbed on the bandwagon of “lower-cost manufacturing opportunities in Asia and Eastern Europe, but slowly a combination of events and economic reasons have reduced the advantage. Our experience is backed by comments from other companies, and we know that work is now flowing back to the UK at an ever greater rate.

“While the overseas price advantage of some 80% a decade ago has been progressively eroded to nearer 30%, it is the additional benefits provided by the flexibility of local supply, significantly fewer quality issues, shorter lead times, and ready face-to-face personal contact that are driving the return of work to UK suppliers.”

Mr Owen says that regular investment and the use of a single source of machine supply – Bushey-based Citizen Machinery UK Ltd (www.citizenmachinery.co.uk) – have been key factors in continuing to build his business over the last few years. As work in the UK started to be sent offshore he was able to maintain a core customer base, but he admits to relying on ‘a top-up’ fast reaction sub-contract service to ‘fill in’ when there were supply problems from overseas. However, this began to gradually change to more-continuous work as a result of ‘dual sourcing against importers’ and, more recently, to Precision Products being highly rated as a single-source supply.

“More and more customers are now requesting added value from us, such as sub-assembly, finishing and specialised packaging for direct to-line supply. It’s a changing scenario, and you have to be able to react if you are to take maximum advantage.”

Precision Products is currently producing batches of 100 finished assemblies of wallmount brackets for flat-screen televisions, 12 variants of automotive switch sub-assemblies (these are being shipped at the rate of three pallets a month, each weighing a tonne), and 2,000 very-high-precision ‘water fitting’ assemblies for a prestigious domestic-products company. Much of this work is delivered according to strict Kanban requirements.

Precision Products has two machine shops on the South Coast: its headquarters in Rustington, near to Littlehampton, and a facility in Hollingbury, Brighton. The company employs 40 people and generated sales of more than £3 million in 2011. Set up in Brighton in 1974 by Mr Owen and his father, the company had three sites in its heyday and employed 90 people running capstan lathes, single-spindle cam autos and multi-spindle autos. Like most sub-contract machinists, it has suffered the pressures of a ‘cyclic business’, but by using the latest equipment Mr Owen has maintained turnover and improved profitability with fewer people, supplying turned parts in the diameter range 1-51mm. Today, the company can produce well over three million parts a week!

Talking about investment in new technology Mr Owen says: “We installed our first two-axis CNC machine in the mid-1980s – at a cost of £120,000 – under the Government’s Small Engineering Firms Investment Scheme (SEFIS); this created the culture change that we have maintained to this day.”

His policy now is to purchase the first machine of a particular type to the highest specification, thereby ensuring that it will be able to tackle virtually any application. However, he does not like to be reliant on one machine, so when a second is ordered, he reduces the specification slightly; this cuts the purchase cost while giving him a machine that can act as a ‘substitute’ for the first machine if there is a problem – or ‘back it up’ if additional capacity is needed.

One of the four recently installed machines, the Miyano BNA-42DHY – a seven-axis turnmill centre – replaced a Miyano BNC-34 two axis lathe that was bought to produce a range of parts required at the rate of 10,000 a month. The new turning centre has a 42mm capacity, a 1m short-bar loader, a 7.5kW main spindle and a 5.5kW sub-spindle. It also features an eight station Y-axis main turret that can provide up to 16 tool positions (eight driven by a 2.8kW 5,000rev/min motor), and a totally independent six-station sub-turret. Mr Owen says this machine provides a host of new opportunities.

The latest Citizen K 16E was specified with an adaptor to increase its capacity to accommodate 18mm-diameter bar; it replaced two older sliding-head machines that had achieved more than 40,000 running hours. The new machine was installed with the latest IEMCA Elite 220 bar feed. The Citizen K16E can carry up to 23 tools; and via its independent back tool-post, it can carry out front and back machining in parallel. Improved overlapping of operations and direct spindle indexing, with controlled acceleration/ deceleration to the programmed position, is an important contributor to shorter cycle times.

A new Citizen A20 is due for delivery, complementing two existing Citizen A20s at the Hollingbury site. This will be the high-precision guide-bush-less version of the A20, and it will be used to machine special spacers requiring high levels of flatness and parallelism; these parts are destined for an aerospace customer. “Our experience of the Citizen A20 is that it is a real round-the-clock workhorse. Without the guide bush, we will make savings from not having to purchase ground bar stock; and with shorter bar ends, we will make a considerable saving on costly material, as we will get more parts from each bar.

“Extracted from Machinery Market - 24th May 2012 Editorial”