

Witon Engineering's new 25mm bar capacity Citizen sliding head turning centre is taking work off bigger machines and cutting cycle times by 20%.

At Witon's subcontract machining facility in Barnstaple, turn-milling of relatively complex components from 16 mm diameter bar used to be carried out on 32 mm capacity sliding-head lathes, rather than smaller capacity models, to take advantage of the extra CNC axes and tools available on the larger machines.

This type of work has now been transferred to a nimbler, 25 mm bar capacity Citizen Cincom D25-VIII LFV sliding-head turning centre, installed in January 2021. The first two jobs have shown significant cycle time reductions of 20% or more.

Since the mid-90s, the contract machinist has bought 17 bar-fed lathes from Citizen UK, of which one was a 42 mm bar capacity Miyano fixed-head machine, the others being various Cincom sliding-head models for turning up to 32 mm stock. There are currently 11 Citizen machines on the shop floor, earlier models having been exchanged over the years. Lathes from this supplier therefore account for approaching half of the 25 bar autos in the factory, comprising 13 sliding-head models, eight single-spindle fixed-head turning centres and four CNC multi-spindle automatics.

The first component to be transferred to the D25 was an EN1A steel shaft for a lawnmower. The part was formerly produced on an L32-VII, of which there are

New slider cuts cycle times



three on site. As 180,000 have to be produced to fulfil the current contract, the 20% cycle time reduction leads to a significant production cost saving.

The second component benefiting from being machined on the D25 is a 304 stainless steel fuel inlet fitting for an automotive customer. It used to be turn-milled on one of a pair of

Cincom M32s in a cycle time of 72 seconds. This has been cut to 53 seconds, representing a 26% saving. With 55,000-off needed, the economy gained is significant.

Ian Clapp, workshop manager at the Barnstaple factory explained, "We operate a couple of 20 mm capacity, dual-platen sliders of another make and knew this configuration offered quick cycle times.

"However, we saw what our longstanding sliding-head lathe supplier Citizen was offering in the D25, a machine with larger bar capacity plus the ability to carry out work up to 32 mm diameter without the guide bush for more economical material usage when producing shorter components.

"The model also has the benefit of a programmable B-axis, so we decided to go for this option."

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