



Rotamic Precision Engineering, Crediton

Stainless steel aero parts machined faster in one hit



the name in sliding-headstock technology

A stainless steel shaft for an aerospace fuel system is machined at both ends in one hit from S143 aerospace stainless steel bar in a reduced cycle time on the Star SR-20R111 sliding-head lathe at Crediton subcontractor, Rotamic Precision Engineering.

Previously, the part (above top) needed three separate operations on a fixed-head lathe and a vertical machining centre (VMC). The reduction in cycle time has enabled Rotamic to achieve its cost reduction target from the customer.

Gary Squires, Rotamic's workshop supervisor, said, "We used to have trouble holding 25 microns total tolerance on three stepped outside diameters (OD) turned down to around 4 mm from 9.5 mm bar.

"With the Star lathe, the guide bush supports the component close to the point of turning, so every part is perfect."

A more complex, mating part (above foreground) in the same material is also produced to similar tolerance in one hit on the multi-axis Star mill-turning centre more quickly and cost effectively than before. The part is manufactured in batches of 800-off in eight varieties and each previously needed four separate operations.

A facet of Star GB's turnkey package that the customer appreciates is the approach and professionalism of the staff and the 24/7 back-up, which in Mr Squires words has been "brilliant". He is also impressed that the SR-20R111 can be reset and back in production very quickly.

"We thought CNC sliders were difficult to program but it's not the case with the Star - quite the reverse."

**Gary Squires
Workshop Supervisor
Rotamic Precision Eng.**