



B&D Patterns, Hinckley

Cycles are 50% faster on Stars than on fixed-head lathes



Three Star sliding-headstock lathes equipped with high-pressure coolant (HPC) delivered at 2,000 psi (140 bar) have revolutionised stainless steel component production at B&D Patterns in the West Midlands, a leading European suppliers of pipe assemblies to aero engine manufacturers.

The Hinckley company supplies around 100,000 pipe assemblies a year in 1,300 variants to Rolls-Royce, requiring the manufacture of 500,000 components in 850 variants. They are machined from S80 stainless (EN57), a corrosion-resistant aircraft steel, high in nickel and chromium, which is challenging to turn as it produces long, stringy swarf that is difficult to chip.

B&D used to produce these components in-house on 28 fixed-head lathes without HPC. However, against a background of increasing orders, the

company decided to upgrade production and has installed its first three sliding-headstock lathes – two SV-32s and an SR-20R from Star GB – all with HPC equipment as part of the turnkey solution.

As B&D managing director Ian Burton explained, “Our operators previously had to interrupt the turning cycle on each machine every hour to prise swarf off the component and tools. This no longer has to be done on the Stars with HPC, so higher speeds and feeds can be used.

“There is now no need, for example, to waste time centering, drilling a pilot hole, and then drilling a hole to full diameter using three successive tools. An 18 mm indexable-insert drill can be fed straight down the centre of a 32 mm diameter, S80 bar in one operation without fear of swarf clogging the hole.”

the name in sliding-headstock technology

“Cycles are 25% to 50% faster on the Stars than on our fixed-head lathes, and second ops are eliminated”

**Ian Burton
Managing Director
B&D Patterns**