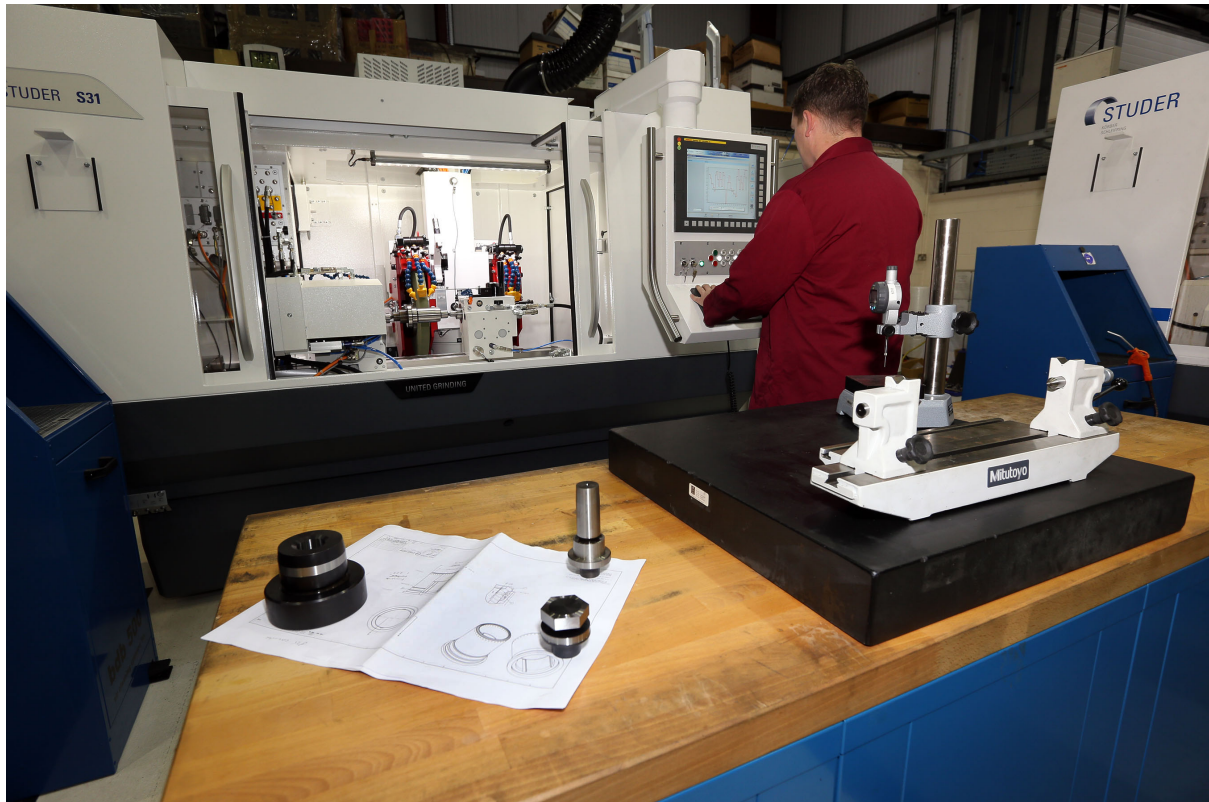


New Studer Increases Advanced CNC Grinding Capacity at GB Precision

High-accuracy subcontract grinding work has always been a significant area of expertise for West-Midlands based GB Precision, which specialises in the supply of complex tooling solutions to customers in sectors ranging from pharmaceutical to F1. With a rapidly increasing grinding workload, particularly in ultra-hard tool steels and carbide, the company recently made the decision to invest in a third, high specification Studer machine, this time an S31, to add to its two existing Studer S21s.



As MD, Paul Turner, explains; “We have built our business and our reputation on tackling the most challenging grinding jobs, which is why we had specified thread grinding and out-of-round options on our original Studers. However, these machines were already running at almost full capacity, and, as we are seeing a growing demand for grinding mid-sized work-pieces in harder materials, the decision to go for an additional, larger Studer made a lot of sense.”

One of the most appealing aspects of the S31 to GB Precision, is the fact that it has been designed for maximum flexibility, with the ability to grind individual work-pieces as well as to handle small batch work, the areas in which GB Precision specialises, with a centre height of 175mm and distance between centres of 650mm, making it particularly suitable for use in tool-making.

With design features such as the large opening double doors allowing easy access for set-up - as well as the option to retrofit automation if required at a later date, side doors to the machine enclosure and auxiliary tools to make changing the grinding wheel quick and easy, plus the full enclosure so that either emulsion or oil can be used as the cooling lubricant, it is not only the technology of the machine that is increasing grinding productivity at GB Precision.

Paul continues, “For us, one of the key features of the S31 was the high accuracy revolving wheel-head which lets us carry out any external or internal grinding, at any programmable angle in a single clamping, reducing set-up time and the possibility of human error. And, of course, we are always looking for trouble-free working, with minimum maintenance downtime, so the wheel-head with a water-cooled motor-spindle, on roller bearings, with infinitely variable speed control, was attractive too.”

GB Precision specialises in grinding in high-accuracy, complex forms, including thread grinding, which is why Studer’s fine adjustment features, allowing the automatic setting of intermediate angles with a resolution of 0.0001degrees, together with the position and speed controlled C-axis, and direct measuring system mounted on the work-head spindle, is of particular benefit.

In addition, the machine’s extremely solid mineral base gives it excellent dampening and thermal stability, combined with the air conditioning system installed in the GB Precision tool-room this enables optimum grinding finishes at higher speeds with extreme accuracy and tolerance-holding capability.

Paul sums up; “The S31 in our specification can drive two rotary dressers set on the machine simultaneously. This means that we can now grind with larger, more powerfully driven CBN and vitrified diamond wheels, so we can meet the increasing demand for high-accuracy grinding of very hard tool steels and carbide. That sort of work is not every one’s cup of tea, it requires specialist skills – which we already have, and specialist equipment, and capacity, which, with our new Studer, we now have as well.