

## performance pack



### What is the MSP Performance Pack?

Metrology Software Products (MSP) is founded on decades of metrology, calibration and machining experience. Their Performance Pack contains quality equipment vital for calibrating a machine before part manufacture. This eases the production process as the ready-made pack calibrates your probe and assesses your machine, subsequently meaning there is no requirement to find an alternative method.

### Benefits

Using a Performance Pack provides the physical requirements for NC-Checker to be able to carry out its benchmark checks and significantly eases and speeds up the set-up process. Without a Performance Pack it is necessary to devise an alternative version which may compromise the reliability and quality of the process. Using an MSP Performance Pack, ensures the correct equipment is included within the pack, and as each one is tailored to suit the specific machine it is bought for, this removes any uncertainty from the calibration process. For example, the height of the Sphere Stand will be large enough to allow the machine to move freely around the Sphere with sufficient clearance. In addition, it guarantees the machine will always have the correct equipment needed to perform a benchmark whenever required.



### **Calibration sphere**

The calibrated sphere is required to do the NC-PerfectPart benchmark checks. Despite other spheres being suitable for use, the calibrated sphere provided within the Performance Pack is from leading metrology company Renishaw, ensuring high quality and precision. It also includes a calibration certificate to prove its validity and fits with the MSP Sphere Stand, increasing efficiency and precision.

### **Sphere stand**

This stand has been developed and manufactured by MSP meaning it is specifically designed for running benchmark checks on all types of machine. There are three different sizes of stand available to suit the varying sizes of machine and the Performance Pack can be tailored to suit each individual request. Its rigid design prevents probe push off which eliminates errors, saving vital time and money. Furthermore, the base plate flange has pre-drilled 16.5mm holes to use with T-slot bolts which provide more options for clamping the Sphere Stand to the table.



### **Basemaster**

The Basemaster is an accurate length setting device and hugely increases precision within the machine checking process. Typically, a Basemaster is used for setting tool lengths, however, it can be used to set the Z height of the Calibration Sphere by magnetically attaching to the gauge face of the machine.

This makes it possible to accurately locate the position of the Calibration Sphere in the z-axis without using the probe.

Traditionally, the method involves using a tool of known length and a slip gauge. This approach can be problematic as the feel of different operators may vary. Using a Basemaster removes this disruptive variation, decreases set-up times and provides a much more accurate and reliable process.