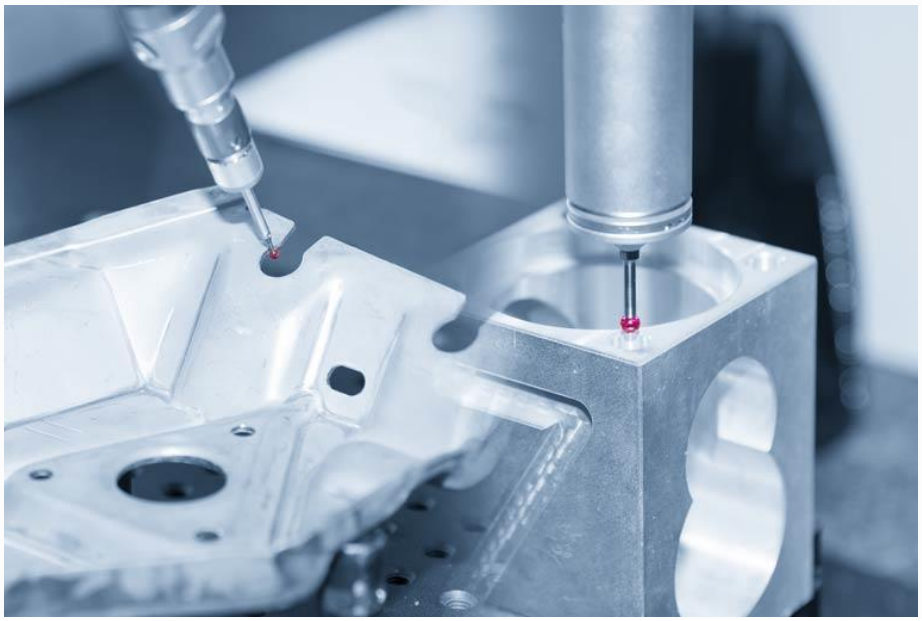
What is a CMM and why do you need it?

A coordinate measuring machine (CMM) is a device used in the measurement of the physical geometrical characteristics of an object. These machines can be manually controlled by an operator or they may be computer controlled. Measurements are defined by a probe attached to the third moving axis of this machine. A coordinate measuring machine (CMM) is also a device used in manufacturing and assembly processes to test a part or assembly against the design intent. By precisely recording the X, Y, and Z coordinates of the object, points are generated which can then be analysed via regression algorithms for the construction of features. These points are collected by using a probe that is positioned manually by an operator or automatically via Direct Computer Control (DCC). DCC CMMs can be programmed to repeatedly measure identical parts, therefore this can be seen as a specialised form of industrial robot.



What are the benefits of using a CMM Inspection service?

These unique pieces of technology will save your company time and money. As manufacturing becomes more refined and parts are made more complex, the requirement for accurate and precise measurement services become more and more mandatory. This is where CMM Inspection Services can offer your company the results you need. Whether you choose a Portable, Bridge or Gantry CMM, you can say goodbye to having to depend on a dimensional lab or needing to take large parts away from the shop floor. You and your company can enjoy accurate results, in a small amount of time.

Floor space can be saved and used more effectively and in any environment, space is always hard to come by. Measuring large components can be difficult and this scenario can prove difficult to overcome. This is where a portable measuring machine service can be your saving grace. Particularly in the automotive, manufacturing or aerospace industries, portable CMM's can offer high-accuracy and convenience when you need to measure parts that can't be moved. Truly portable and wireless, these CMM's are also ideal for geometric surfaces and overall quality control.

You can enjoy verification of product quality, by commissioning 3D inspections, tool certifications, CAD comparison, reverse engineering and dimensional analysis, CMM Inspection offer an unssurpassed peace-of-mind service. Quality should always be at the top of your companies list of priorities and by using a CMM Service you can enjoy previously unheard levels of superiority and precision.

What services are available?

Coordinate Measuring Machines (CMM's) can offer your company a long list of benefits. Offering precise measurement of objects for design, assessment, testing profiling, and reverse engineering, you can now enjoy inspecting areas that would normally be hard to measure with standard instruments.

- Batch Inspection & Reporting
- Batch measurements (SPC)
- Capability Studies /SPC
- Casting proofing / mark out / machine to cast
- Consultancy service at the design stage of new projects, to assist with the design of robust dimensioning and methods of measurement.
- Cross referencing
- Digitizing of 3 dimensional forms
- DMIS Program Generation
- Fault finding by measurement
- First Article Inspection Reporting
- First-off inspection report (FOIR)
- Fixture inspection/calibration
- Initial sample inspection report (ISIR)
- Inspection to CAD
- Inspection to Drawing
- Measurement systems analysis (MSA)
- Multi-cavity inspection reports
- On-Site CMM Operation & Programming
- Over flow services
- Repeat Measurement
- Reverse Engineering
- Reverse engineering (actual component measurements in CAD model format)
- Scanning (contact and no-contact)
- Sub- contracted services
- Tool trial reports

What type of company should I use for CMM Inspection Services?

Ensure they deploy the latest in Co-ordinate Measuring Machine and Inspection Technology to not only provide inspection services, but also BS EN ISO/IEC 17025:2005 UKAS Accredited Metrological Testing and Reporting. It is crucial to ensure the accuracy of precision engineered components for their individual applications. Engineers must be experienced and highly qualified at measuring all types of materials and products across a wide range of industries including: Aerospace, Automotive, Defence, Healthcare, Packaging and Pharmaceutical. The company must continue to invest in the latest software and development training to ensure staff maintains a high level of performance to industry standards.

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