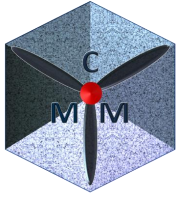


CMM PROGRAMMING LTD.

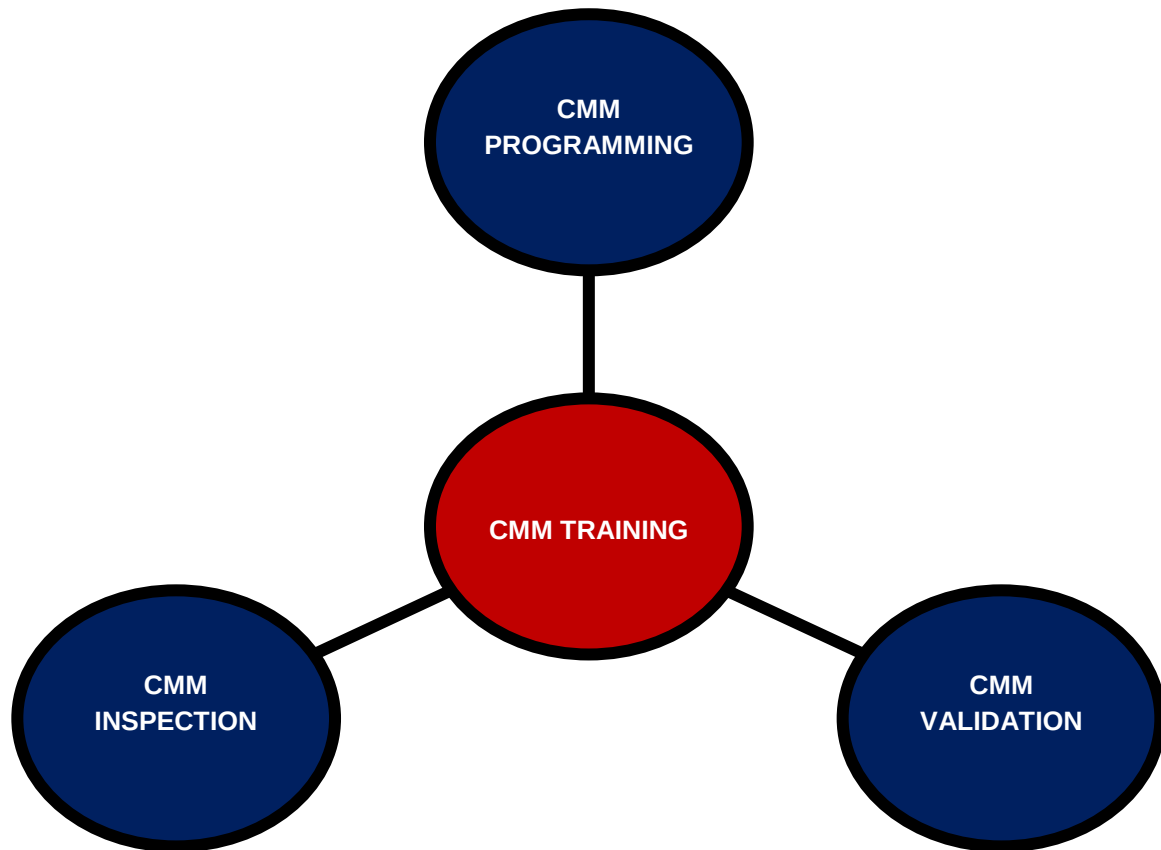


***CMM Programming, CMM Training and CMM
Inspection Services***



Tel: +44(0)1507 478872

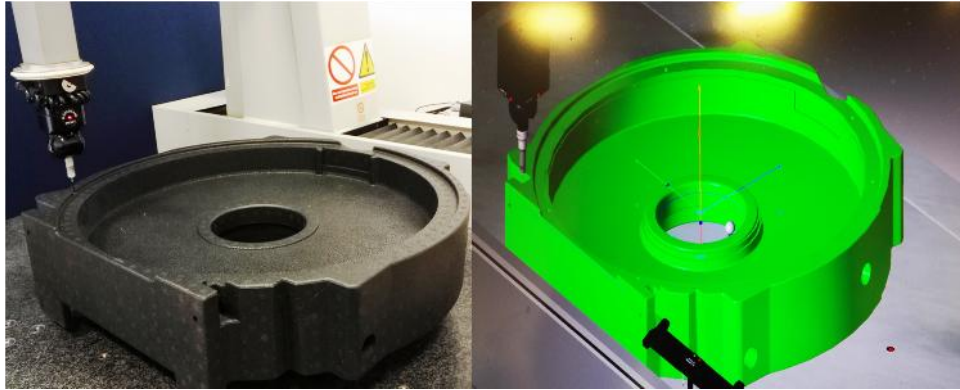
CMM PROGRAMMING LTD.



For All Your CMM Needs

CMM Programming Ltd. Head Office:
Unit 6c, Enterprise Road, Mablethorpe, Lincolnshire. LN12 1NB

CMM Programming Services



CMM Programming

CMM Programming Services can be provided for large or small projects. CMM programming can be provided on or off site using Pcdmis or Mcosmos CMM Programming Software. Our off site/off line CMM Programming uses your CAD data and drawing to write the CMM program. We then give you several choices for installation. We can also provide a CMM operator, should you require one.

CMM programming services can be provided for all long-term and short-term projects. We have highly skilled Applications Engineers, who can provide CMM Programming Services at your site using PC-DMIS, MCOSMOS, CAT1000, or GEOPAK Software. All our programmers are experience in handling large components, such as Rolls Royce aircraft components. As experts in our field, we can provide accurate inspection routines for complex parts. We also provide generic CMM Programming for components of a 'like' nature. This allows a speedier turnaround, because only sections of the CMM Program needs to be altered.

Off-Line CMM Programming

For those who require to have their CMM Programming off-site. We do provide off-line CMM Programming. Provided that you have a CAD Model and Drawing, we can write your CMM Program and give you the program to run. (Installation can be provided). This option is very useful when you require your CMM to measure parts, and not to be left redundant whilst a program is being written, or to have to stop measuring parts, because it is being used by your programmers to write the program. By writing the program off-line, you are able to continue to run your CMM for what it was designed for, measuring parts.

CMM Programming Validation

CMM Programming Ltd. Can provide you with a completely independent CMM Programming Validation Service.

For some industries, this has now become an integral part of the Quality Control Process, particularly for the CMM Measurement of critical parts.

By using us as a third party verification process, it ensures that exactness is monitored accurately and eliminates uncertainty.

CMM Training



Mcosmos Training

Our CMM training on Mcosmos CMM Software consists of a 3 day (minimum) practical training course.

There are 3 entry levels; 'Basic' or 'Beginners' level,

'Moderate' aimed at those with some basic knowledge and understanding but with limited CMM programming knowledge.

And 'Advanced' aimed at those with more experience of programming but require training on 'off-line' CMM programming.

As we offer training on your own components, it is quite common that customers need training on specific parts of the software, which can be more practical for their own situation. We can therefore offer CMM training as a bespoke package.

As a guide line only, the course content consists of:

Mcosmos Training 'Basic / Entry Level'

- Care of the CMM
- Basic CMM Operation
- How to build a probe
- How to calibrate a probe
- How to create a simple alignment, rotate and translate.
- Dimensions
- Reporting
- Simple CMM Program to enable CNC auto repetition of measurements on similar parts
- Editing part programs

Mcosmos Training 'Moderate'

- Creating an R.P.S. alignment
- Creating both a 2D and a 3D best fit alignment
- Scanning
- Building geometry and surface data from scanned points
- Use of variables within a program
- Reporting
- Creating a program to include scanning and variables
- Editing programs to enable changes to be made

Mcosmos Training 'Advanced'

This will largely consist of learning how to write a CMM Programme directly from the drawing and CAD model.

Bespoke Mcosmos Training

This can be given to your exact requirements, and may include for example, the areas below:

- 3D Scanning
- Looped R.P.S. alignments

Our CMM Application Engineers are all apprenticed trained and have over 30 years practical experience.

PC-Dmis CMM Software Training

Our CMM training on Pcdmis CMM Software consists of a 3 day (minimum) practical training course. There are 3 entry levels; 'Basic' or 'Beginners' level.

'Moderate' aimed at those with some basic knowledge and understanding but with limited CMM programming knowledge.

And 'Advanced' aimed at those with more experience of programming but require training on 'off-line' CMM programming.

As we offer training on your own components, it is quite common that customers need training on specific parts of the software, which can be more practical for their own situation. We can therefore offer CMM training as a bespoke package.

As a guide line only, the course content consists of:

PC-Dmis Training 'Basic / Entry Level'

- How to take care of the CMM
- Basic CMM operation
- How to build a probe
- How to calibrate a probe
- How to create a simple alignment, rotate and translate
- Dimensions
- Reporting
- Simple CMM Program to enable DCC auto repetition of measurements on similar parts
- Editing part programs

PC-Dmis Training 'Moderate'

- Creating an iterative alignment
- Creating a best fit alignment
- Simple 2D Scan
- Creating geometry from 2D scanned data
- The use of variables
- Reporting
- Programs containing 2D scans and variables.
- Editing of CMM programs

Pcdmis Training 'Advanced'

All of the aspects covered in the 'Entry Level' and 'Intermediate Level', being created directly from CAD Models.

PC-Dmis Bespoke Training

(Duration dependent upon requirements)

This can be given to your exact requirements, and may include for example the areas below:

- 3D Scanning
- Looped iterative alignments

CMM Inspection Services



Our CMM Inspection & Measurement Department includes a high speed Ceramic CMM. This allows a fast 'turn around' for the inspection or Measurement of your components.

Our highly skilled CMM Applications Engineers, will ensure we deliver an outstanding service for all your CMM Inspection needs.

We have over 30 years experience in CMM Inspection and Measurement and are proud that our CMM Engineers are considered to be amongst the best in the UK.

Our CMM Inspection Measurement Services includes

- CMM Batch Inspection
- CMM Prototype/pre-production Inspection
- 3D printed model (in advance of component) if required
- CMM Single Item Inspection
- CMM Initial Sample Inspection and Reports (ISIR)
- Reverse Engineering
- Subcontract Inspection
- We can provide you with a CMM inspector if required
- We guarantee to beat any 'like' for 'like' quotation
- Weekend service also available

Subcontract CMM Inspection Services

CMM Programming can provide you with an excellent subcontract CMM inspection Service.

If you are running at full capacity and have an overflow in workload, or just require project work to be inspected on a CMM, we are here to help.

Subcontracting your CMM Inspection measurement, can reduce time restraints considerably by reducing the 'bottleneck' that usually occurs in the CMM Inspection Department.

We have very competitive prices and guarantee to beat any 'like' for 'like' quotation.

3D Printing Services

We can 3D Print your component from your CAD Drawing.

3D printing is fast becoming the 'norm' rather than the 'exception'.

By having your component printed, it can save time and money.

It is particularly of benefit for prototype development and can save an enormous amount of time, taking hours rather than weeks.

As far as engineering components are concerned, it can eradicate errors before full production takes place.



3D Printing Can Save Time And Money



3D Printed Components

CMM's and Accessories

We have a number of used CMM's for sale. We can also provide you with free independent advice on purchasing a CMM. (Please contact us for further information).

Accessories

We stock used items such as Styli, measuring equipment and other CMM accessories. Please download our brochure at www.cmmprogramming.co.uk, or contact us on: +44(0)1507 478872.

Background Information

Industries/Sectors

Amongst others, our highly skilled CMM Application Engineers, have experience in:

- Satellites and defence
- Automotive Including Engine Components, Cranks, Blocks, Cylinder Heads, Conrods and Pistons
- Power train Components, Under Bonnet Plastics and Trim etc.
- Medical / Pharmaceutical: Medical Devices and Equipment, Implants and Prosthetics.
- Plastics
- Aerospace (Rotary and Stationary Turbine Blades)
- Military and Defence.

Customers

Our customers have included: (Amongst many others)

- National Physical Laboratory (NPL)
- McLaren
- Cosworth
- Rolls Royce
- Unilever
- Johnson & Johnson
- Mahle
- Crown Bevcn
- Aston Martin

Contact Information

Contact Address

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Enterprise Road,
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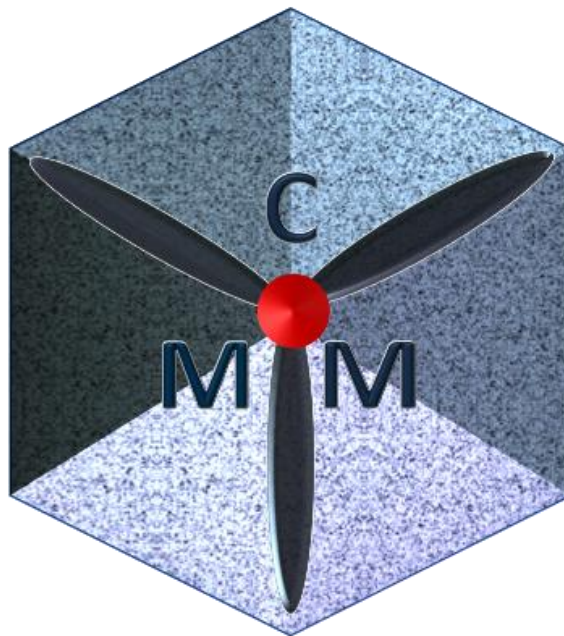
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