



PRESS RELEASE

NCG CAM v11 is Officially Released Download a Demonstration Version Now

NCG CAM Solutions Ltd, UK has officially released NCG CAM v11. This major release includes a new true surface machining option, new analysis functions, improvements to along curve passes (2D geometry), the ability to create 'clean' curves from the surfaces and improvements to the folder management for databases with a large number of folders.

**A demonstration version of NCG CAM v11 is now available to download -
<http://www.ncgcam.com/demorequest.html>.**

NCG CAM has historically machined triangulations, rather than true surfaces. Machining the triangulations is quick to calculate and check against for gouge free machining.

There are a number of advantages to machining the true surface data as opposed to machine the triangulations. Machining the surfaces is more accurate (though machining the triangulations is within the specified tolerance) and will provide a better surface finish.

One disadvantage is that the calculations to ensure the machining is gouge free will take longer in most cases, (calculation time being the disadvantage). For parts requiring a polished surface, the true surface machining will create savings further down the line.

Machining the surfaces also spaces the points in the NC Tape file more uniformly, giving a better / smoother machine movement on some machine tools.

True surface machining has been added into **NCG CAM** v11, as an option. The user can choose to machine the true surfaces, which is slower but gives a very high quality surface finish, or they can machine with the normal high speed machining time.

The aim is that customers cutting hardened steels or electrodes (for EDM solid sink erosion) they do not want to have to hand finish should not be able to see the fine witness lines from the triangulation that can be seen on some occasions (depends on the curvature of the part and triangulation tolerance).

New analysis functions have been added to **NCG CAM** v11. This is a graphical display using a colour overlay and the cursor tool tip to show information about the part that can help with cutter selection and possibly how the job is approached tool-path wise.

The main analysis functions are:

- Curvature will allow the user to quickly find out what the smallest radii is on the part to aid cutter selection. The radii limits (min and max) can be defined / limited by the user, the user can also filter internal / external radii. The colour overlay provides a quick visual guide, the cursor tool-tip will then provide a more accurate radii size.
- Draft will show draft angles and the cursors contact angle. This will help show where a tapered cutter could be used. When used with a suitable boundary, this works for 3+2 machining also.
- Stock will graphically show the depth of the remaining stock as a coloured overlay, using a 3D stock model and the triangulated surfaces. The tool-tip again providing the accurate depth of remaining stock. This will work for 3-axis and 3+2 axis jobs.

General improvements have been made in **NCG CAM** v11 to the along curve machining to make it more useful for simple 2D machining.

The main improvements are:

- Multiple points can now be pre-defined and used as start hints. The ability to specify a set of start hint points has been introduced in the linking, allowing several curves to be machined in a single operation. This enhancement has been applied to some other strategies to improve the linking of multiple areas.
- A pass overlap has been introduced for closed curves; this is to allow the cutter to go past the start point to ensure a better finish.
- The pass extension is to allow the toolpath to extend beyond the ends open curves, so the cutter can start and finish off the part, giving a better result and cutting conditions. The extension can be applied at the start, end or both.

- When linking a closed profile, **NCG CAM** v11 will attempt to place the lead in / out towards the middle of a flat section (not on a corner or arc) wherever possible; giving automatic positioning of start points.

The ability to create 'clean' curves from the surfaces has been added in **NCG CAM** v11 to extend the scope of the 2D machining with cutter compensation.

This has improved simple curve creation and manipulation, mainly to:

- Create curves from surface edges with true arcs
- Change direction of curves outside the machining dialog
- Break, extend and close curves

The management of large or complicated databases has also been improved in **NCG CAM** v11. A folder can now be created in the tree view on the left side of the graphics window, and the user can drag other folders inside to be able to clean up the tree view, having a roughing folder, finish pre heat treatment and finishing folders for example.

About NCG CAM Standalone 3D HSM CAM Software

NCG CAM HSM CAM software is an easy to use stand-alone CAM system that integrates with existing CAD and CAM systems.

NCG CAM boasts many innovative features. It is suitable for all types of forms, creating an optimised, smooth cutter motion ideal for 3D HSM machining, which will help to extend tool life, minimise wear on the machine tool and producing parts with an excellent surface finish.

NCG CAM has a very user-friendly interface, with a typical learning curve of just 1 day is required to machine a live job. It is perfect for the high-speed machining of moulds, dies, prototypes and precision surface machining.

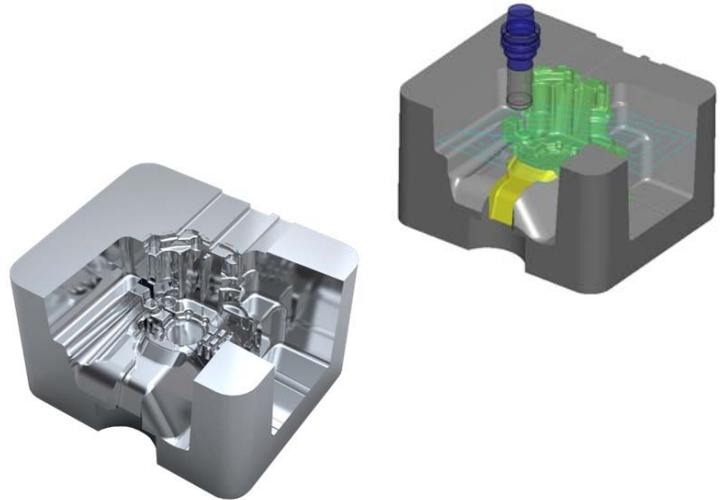
Features

- Very user friendly interface – making it suitable for even occasional users
- **NCG CAM** offers many advanced 3D machining routines, rest roughing & 3 + 2 capabilities for all toolpaths, a simultaneous 5-axis add-on module is available
- Fast and efficient roughing strategies, including core roughing and adaptive clearance
- Advanced drilling routines – includes automatic hole detection and / or user defined holes

- All machining routines are fully gouge protected for both the cutter and the tool holder
- Rest area option for finishing strategies to minimise any air cutting
- Available as both 32-bit & 64-bit versions (both are multi threaded)

Key Benefits:

- Stand alone CAM software that is compatible with **ANY** other CAD package
- Extremely easy to use with just 1 day's training required to machine a live job
- Ideal for shop-floor programming
- Gouge protection for cutters and holders
- All post-processors are written in-house
- Powerful 3D machining
- Toolpaths optimised for HSM machining
 - Increased efficiency
 - Reduced wear on machine
 - Extended tooling life
- Saves time and money!



A demonstration version of the **NCG CAM** software, is available to download -

<http://www.ncgcam.com/demorequest.html> . The demonstration version of **NCG CAM** has unlimited usage and while there are restrictions to the machining output, it can also be used in its basic form as a **FREE** .iges viewer.

About NCG CAM Solutions Ltd

Established in Cambridge, UK, **NCG CAM Solutions Ltd** provides CAM software solutions, offering all the tools needed to manufacture prototypes, models, moulds, dies, patterns and finished products. Our specialist area is 3D HSM CAM with our product **NCG CAM**.

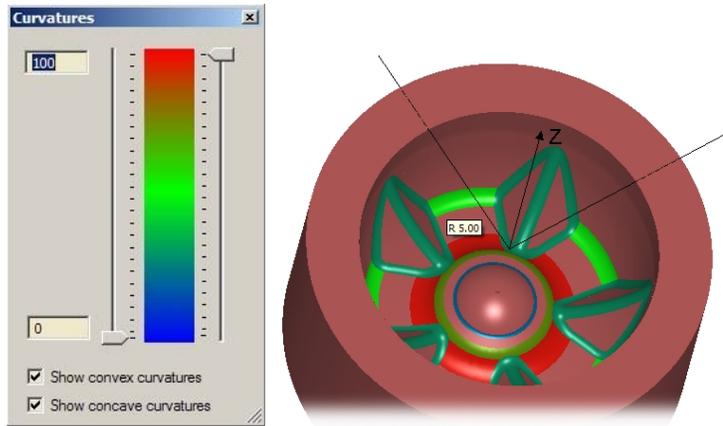
All of our staff have a wealth of CAM experience, having worked in the CAD/CAM and engineering industry for many, many years. This includes our support team who have actually worked on the shop-floor using CAM software on live jobs, so are able to provide an excellent back up and support service for the software.

Since establishing in June 2009, NCG CAM Solutions Ltd have a rapidly growing global reseller base, with resellers for NCG CAM in UK, Germany, Italy, Spain, Benelux, Slovenia, Slovakia, Hungary, Czech Republic, Romania, Bulgaria, Serbia, Croatia, Poland, Turkey, Egypt, Middle East, India, Ukraine, Russia, China, Taiwan, Japan, South Korea, Australia, Mexico, Brazil, South Africa, Canada and across USA.

To contact a reseller or to download the demonstration version of **NCG CAM**, visit www.ncgcam.com .
Alternatively contact Estelle Dunsmuir for more information – estelle@ncgcam.com or call +44 (0)1223 863911 / +44 (0)1353 699840.

(ENDS)

Pictures – NCG CAM V11



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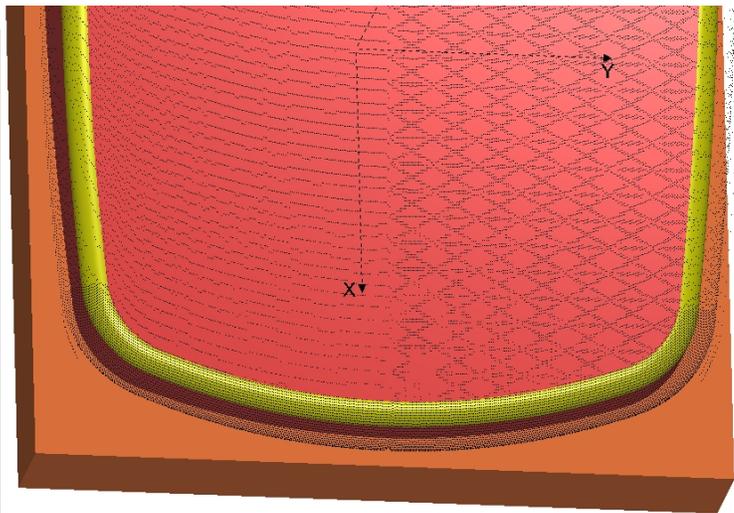
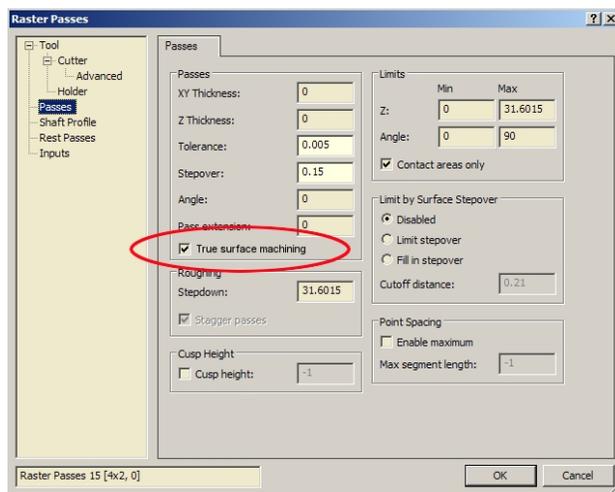
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Above – New Analysis Function - This is a graphical display using a colour overlay and the cursor tool tip to show information about the part that can help with cutter selection and possibly how the job is approached tool-path wise.



Showing the true surface machining option in the user interface.

Showing the points in the tool-path, on the left of the part true surface machining was used, on the right the triangulations were machined.



Above – True Surface Machining Option

On the machined part it is easy to see the difference, on the left of the part true surface machining and on the right the triangulations were machined. You do not notice any difference in the machines motion or machine time, only in the surfaces finish.