PRESS RELEASE

NCG CAM v16.0 is Officially Released
Download a Demonstration Version Now

NCG CAM Solutions Ltd, UK officially released NCG CAM v16.0 on 15th January 2018. This major release includes a number of new features including Selected Surface Machining for Waterline Passes, Combined Passes for Waterline & Constant Stepover, Tangential Extension for Raster Passes, 5-Axis Flank Machining, as well as many new user interface features and enhancements.

A demonstration version of NCG CAM v16.0 is now available to download:
http://www.ncgcam.com/demorequest.html.

In **NCG CAM** v16.0, a new feature had been added to **extend the ability of the 'Machine Selected Surfaces' to include Waterline passes**. This new feature in **NCG CAM** v16.0 extends the ability of the 'Machine Selected Surfaces' to include Waterline passes. This provides the ability to machine up to the surface edges without the need to create a boundary, in the same way as can be selected for the Shallow strategies, Raster, Radial and Spiral.

A new routine is now available that allows the creation of **Waterline Passes** between the upper angle of 90° down to a specified lower angle. **Constant Stepover Passes are then created to 'fill in' the shallow areas** between the specified lower angle and 0°. Linking is a single operation from the top down, so that the linking order is a combination of waterline, constant stepover, waterline, etc. This strategy will give a smoother finish because it allows the machining to be done in a single operation, avoiding the problem of cutter wear.

Another new feature in **NCG CAM** v16.0 **allows Hole Plans in the Tree View to be 'Tagged' and identified with a coloured marker** if they have previously been used to generate drilling cycles. This visual difference makes it easier to identify the remaining holes that require machining.

In previous software versions, extending **raster passes**, would allow the cutter to roll over the edge. A new extension option creates passes that are **extended at a tangent to the ends of the existing passes** and therefore extend the path beyond and away from the material being cut. The result of this is that sharper edges are maintained. A horizontal pass extension has also been added.

A new feature has been added to give the **ability to trim the passes back** by a small amount, which will eliminate any slight marking that could potentially be left on vertical walls immediately in front of the passes.

A new feature to **calculate the cutting direction vector using 2 mouse clicks** that snap to the wire frame model to determine the angle, is now available. This will save the user time, as currently, if an accurate angle is required, the model must be interrogated manually. While the Passes Dialog is open, the coordinates are recovered from the model in the Graphics Window. The result is then entered into the 'Angle' field in the dialog.

The basic style of the user interface has remained unchanged since this CAM software was first produced. **Modernising various aspects of the interface** is in the process of being addressed and will be rolled out in **NCG CAM** v16 point releases.

Improvements in **NCG CAM** v16 will include:

- Better handling and positioning of the Toolbars when the graphics window is narrow.
- The ability to dock the Process Manager.

The aim is to make the user interface better and easier to use, not just different.

In **NCG CAM** v16.0 is now possible to **specify the cutters overall length value in the Tool Database**; E.g: The value that is usually referred to as 'L1' in a tooling catalogue. The 'Body Length' value is the 'Usable body length' of the cutter. E.g: The part that is exposed from the Holder.

A **Recycle folder has been added to the Directory Tree View for deleted items**. This allows the user to Choose and Restore specific items, if required.

Cutting parameters that have been set are now retained when transforming a parametrised toolpath. Previously, the Transformed Toolpath folder was presented in the directory view; the properties of this were the details of the transformation. This new toolpath has its' parameter values reintroduced. This new action saves the user time spent doing this manually.
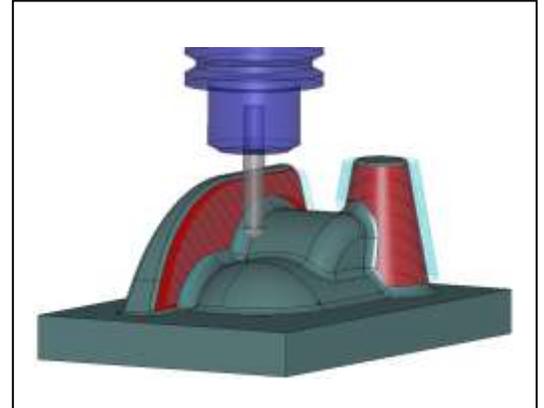
Flank Machining is a 5-axis simultaneous milling process that can be used typically for fluid parts in turbo-engines, aeronautical applications, turbine and impeller blades and is available in **NCG CAM** v16. Using the whole flute length of the cutting tool, the aim is to machine the part surface in only one cut.

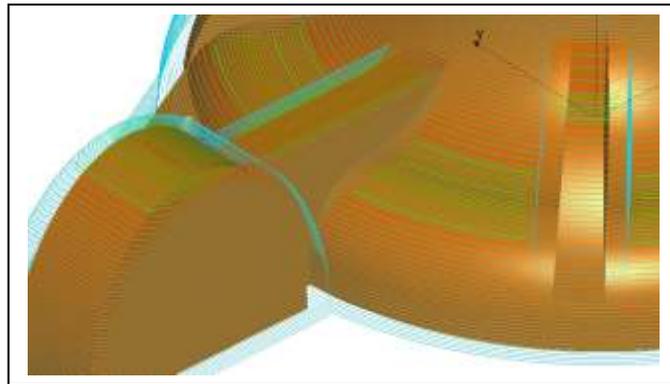Roughing and finishing cycles are now available, together with automatic linking and tilting.

Another new feature which will soon follow in an **NCG CAM** v16 point release will provide **support for Barrel type cutters** when using the 5-Axis machining routines. The defining feature of a barrel cutter is the "circle-segment" radius; this allows a much greater area of engagement between the cutter and work piece when compared to a typical ball-nose tool. This larger engagement area allows the use of larger step-over values, while still maintaining surface finish. Metal removal rates are also expected to be improved when using barrel cutters and less cutter wear when compared to a typical ball-nose tool.

Picture – NCG CAM V16.0

Right – *Selected Surface Machining* – **Waterline Passes**

Below – **Combined Passes – Waterline & Constant Stepover**

About NCG CAM Standalone 3D HSM CAM Software

NCG CAM is stand-alone CAM system offering an easy to use HSM CAM solution 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, which will help to extend tool life, minimise wear on the machine tool and producing parts with an excellent surface finish.
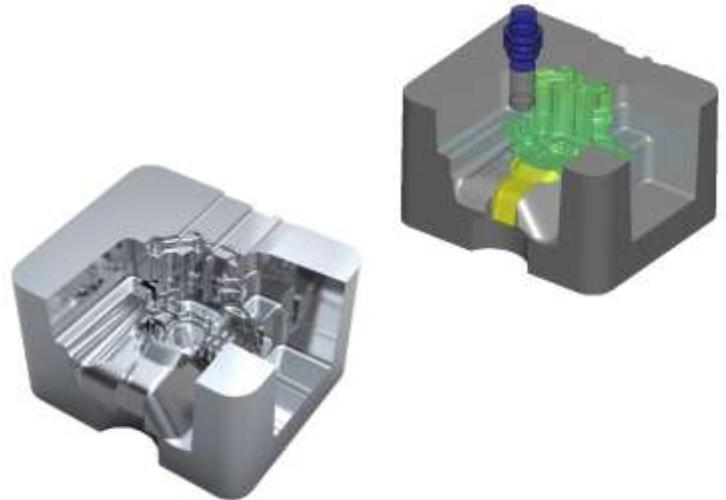
NCG CAM has a very user-friendly interface, with a typical learning curve of just 1 day is required to machine a live job. It is perfect for the high-speed machining of moulds, dies, prototypes and precision surface machining.

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 tool-paths, a simultaneous 5-axis add-on module is available
- Fast and efficient roughing strategies, including core roughing and adaptive clearance
- Comprehensive 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
- **<u>Perpetual Licenses are available and will NOT be discontinued</u>**

Key Benefits:

- Stand-alone CAM software that is compatible with ***<u>ANY</u>*** 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
- Tool-paths optimised for HSM
  - 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 ***<u>FREE</u>*** .iges viewer.

Operating system compatibility: Windows 7^{TM} Windows 8^{TM} Windows 10^{TM} on a 64-bit platform, 8GB RAM (minimum).

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 our staff have a wealth of CAM experience, having worked in the CADCAM and engineering industry for many years. In particular, every member of our support team has worked on the shop-floor using CAM software on live jobs, enabling us to provide an excellent back up and support service for the software.

Established in June 2009, NCG CAM Solutions Ltd has a rapidly growing global reseller base, with resellers for NCG CAM in UK, Germany, Spain, Netherlands, Slovenia, Slovakia, Poland, Hungary, Romania, Serbia, Croatia, Norway, Turkey, Italy, India, Ukraine, UAE, Russia, China, Taiwan, Japan, South Korea, Indonesia, Thailand, Vietnam, Australia, Brazil, South Africa and across USA and Canada.

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 236408 / +44 (0)1353 699840.

(ENDS)

NCG CAM Solutions Ltd
7 Trust Court
Chivers Way
Histon, Cambridge
Cambridgeshire
CB24 9PW, UK

Tel: +44 (0) 1223 236408 / +44 (0)1353 699840
Email: estelle@ncgcam.com
Website: www.ncgcam.com

Contact: Mrs Estelle Dunsmuir, Sales & Marketing Director