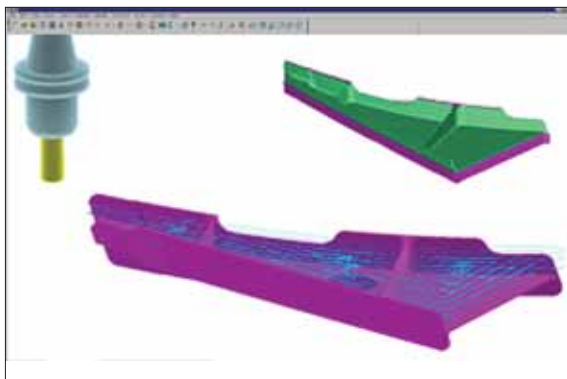


# NEW SOFTWARE CHOICES



## New Geometry Manipulation Eases Programming

NCL multi-axis machining software from NCCS is widely used in the aerospace, automotive and turbo machinery industry. NCL now uses geometry manipulation to allow programmers multiple options when manipulating the geometry of the model. This feature helps to make complicated models easier in five-axis programming.

The latest version of NCL offers many new features, including implementing geometry manipulation.

- In NCL, users now have the ability to manipulate the geometry of solid models.
- The geometry of the model can now be referenced using the color and layer attributes, subscript range and label wildcards. For example, all geometry that is blue in color can be made visible, or all geometry that have PX in their label can be highlighted with a certain color.
- This capability helps to make the part programming process easier while working with the

complicated geometry of the model.

“At NCCS, we are in business to boost shop’s productivity,” said David Schultz, NCCS’ manager of CAD/CAM applications. “NCL’s latest enhancements give programmers better programming techniques, along with the ability to quickly generate complex geometric entities, all within a single interface.”

*For more information, visit [www.nccs.com](http://www.nccs.com).*

## SURFCAM Velocity 4

Surfware, Inc., developer of SURFCAM CAD/CAM systems, recently launched Velocity 4 Powered by TrueMill.

In addition, Surfware recently received a Notice of Allowance from the US Patent and Trademark Office (USPTO) for its Engagement Milling technology. A Notice of Allowance signifies that the application has been examined and is allowed for issuance as a patent. The US Patent Office accepted all key aspects of the company’s patent application.

“The mathematics and science behind Engagement Milling are revolutionary, and we have incorporated that technology into our SURFCAM product line as TrueMill,” explained Stephen Diehl, president and CEO of Surfware. “We are pleased to receive this Notice of Allowance because it serves to protect our intellectual property and proprietary technology.”

SURFCAM Velocity 4 offers major improvements to three-axis finishing, four- and five-axis machining and TrueMill, the proven industry leader in toolpath technology.

- **Three-Axis Finishing:** New high-speed machining strategies featuring faster processing, reduced length of rapid motions, tapered tool support and improved surface finish.

- **Four/Five-Axis Machining:** Precise control over every aspect of multi-axis machining ensuring safe tool motion in the most challenging applications. Support for all standard tools with collision checking, avoidance and toolpath containment.

- **TrueMill:** Provision of recommended Truemill speeds and feeds, improved feedrate optimization, greatly reduced rapid motions, availability of custom designed TrueMill Series tools designed to further improve performance with TrueMill. With TrueMill, the more difficult to machine the material, the greater the competitive advantage.

“This release adds additional world-class features to SURFCAM and solves issues that limited TrueMill’s performance. It takes the unique, patent-pending TrueMill technology to a new level of excellence,” he added.

*For more information, visit [www.surfware.com](http://www.surfware.com).*

## Edgecam 2009 R1

Edgecam 2009 R1 features superior machining efficiencies and increased automation tools within the milling, turning and mill/turn environments.

“We continually expand Edgecam’s powerful multi-axis machining capabilities to ensure our customers can realize the full potential of today’s complex machine tools,” said Raf Lobato, software development director for Planit’s Metals Business.

New programming and usability features include:

- Improved Rest Finishing Cycle featuring support for all tool types, which provides more flexible cycles, optimized toolpath and faster cycle generation

- Advanced new rough turning cycle providing increased efficiencies and improved control of the machining process including notch avoidance

- Expanded Five-Axis capabilities to include nutated head/rotary table configurations

- Five-Axis cycles now check linear limits to alert users if their selected machine is unable to produce a specific feature

- New enhancements to Automatic Feature Recognition (AFR) within Solid Machinist resulting in faster automated programming and optimized cycle time while retaining flexibility for individual changes

*For more information, visit [www.edgecam.com](http://www.edgecam.com).*

## CNC Software Unveils Mastercam X3

According to CNC Software, Mastercam X3 offers expanded machining flexibility and an increased emphasis on speed and automation.

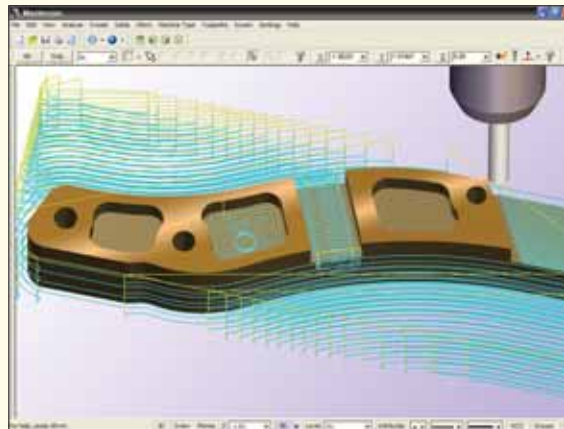
Feature Based Machining, new high speed tool motion and faster toolpath generation combine with dozens of additional new enhancements in a package intended to improve shop floor productivity.

Here are the most significant highlights and new functionality in Mastercam X3:

- **Feature Based Machining** – Almost every shop deals with solid models, and Mastercam delivers a powerful way to automatically mill and drill these parts. Valuable for experienced power users and easy enough for new users, FBM evaluates a part’s features and automatically designs an effective machining strategy.

- **2D High Speed Toolpaths** – The success of Mastercam’s 3D high speed toolpaths leads to new high speed machining expressly for 2D machining. Although optimized for high speed cutting and hard milling, these offer many additional benefits including superior finish and longer tool life.

- **Faster Multiaxis Toolpaths** – Substantially faster multiaxis toolpaths combined with enhanced control lets users get more out of these powerful toolpaths than ever before.



- **Mastercam in SolidWorks** – This powerful new X3 package brings the most popular Mastercam toolpaths directly into SolidWorks. Designers who work with the world’s leading CAD system can now program those parts with the world’s leading CAM toolpaths in the same interface. This package will be released after the general release of Mastercam X3.

*For more information, visit [www.mastercam.com](http://www.mastercam.com). ■*