

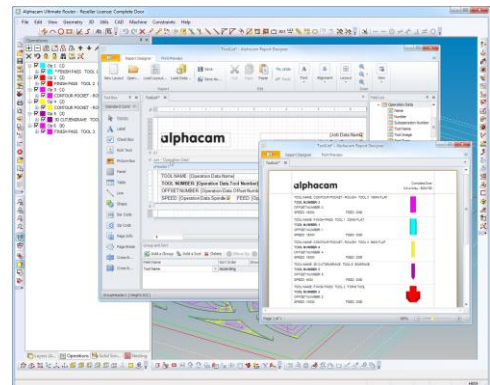
Notes

This document contains a general overview of the new features within **Alphacam 2013 R1**. Please see the *Alphacam 2013 R1 Release Notes* for additional, important information, including an extensive listing of all new product features, enhancements, changes, fixes as well as post processor and API enhancements.

New Reporting Application

The new Alphacam Reports functionality allows for the design and creation of robust documentation such as nested job reports, setup sheets, tool listings, and part labels. Reports can be designed by the user for the user, including company logo, barcode labels, etc.

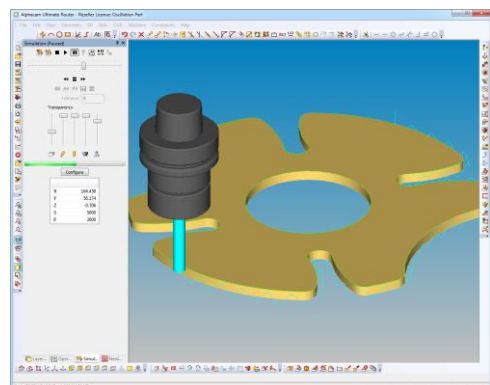
Being able to create user configurable reports and labels improves both part and program traceability.



Tool Path Oscillation

A sinusoidal or zig-zag up and down movement can be applied to any contour tool path, utilizing more of the effective cutting length of the tool used.

This improves the surface finish and extends the tool life. Oscillation pitch and height can be easily set, edited and saved as a machining style for future ease of use.

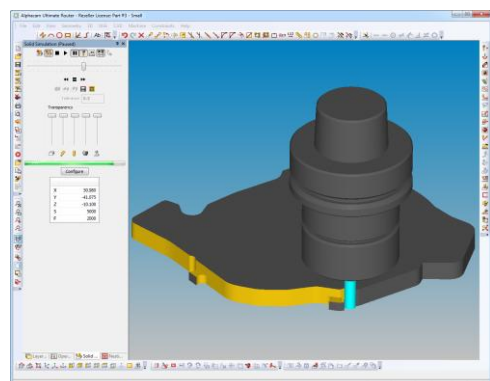


Automatic Support Tags

Support tags can be added automatically to any contour tool path (including 5-axis), allowing the part to stay attached to the material being machined.

This overcomes the issue of small parts moving during the nesting process, reducing material wastage and improving part quality.

Applied tags can be edited easily and included as part of a machining style.

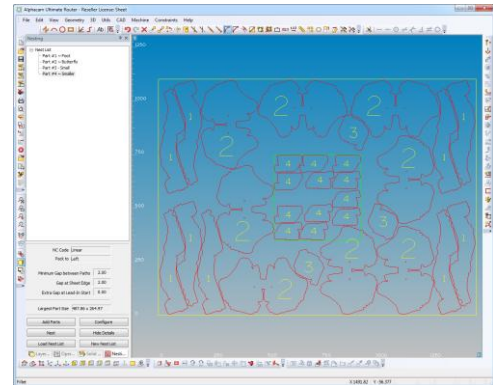


: 2013 R1 what's new

Nesting Zones

Small parts can now be identified and nested into specific areas of a sheet. This means that small parts can be restricted to the area of maximum hold down (e.g., the center of a vacuum clamped sheet) and therefore have the least chance of moving during machining.

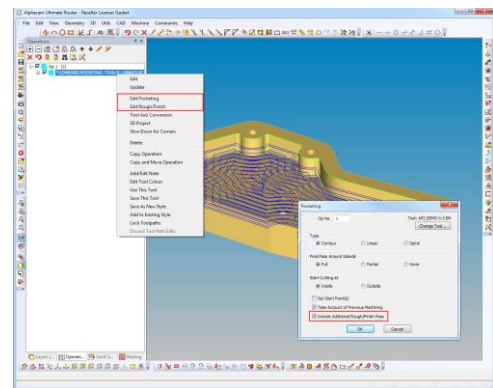
This contributes to reducing material waste and improving the quality of the part.



Combined Pocketing and Finishing

Pocket area clearance and finish contour machining can now be combined into a single machining operation. This improves the quality of the part and reduces programming time.

In addition, while this produces a single operation, the pocketing properties and/or the finishing properties can be easily edited independently and also saved as a machining style for future ease of use.



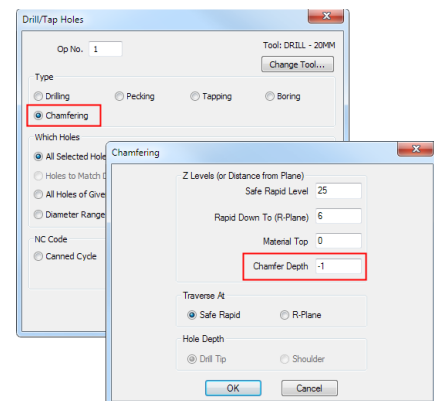
Drilling Enhancements

- A new Chamfering cycle has been added. This new cycle supports drill type and flat type tools defined with taper angles automatically calculates the required machining depth from a given chamfer depth.

All selected holes, including Auto Z support, will be analyzed to ensure the tool can enter the hole where there is a flat on the bottom of the tool, and that the tool diameter is sufficient to complete the full depth of chamfer.

- Many new options have been added to the existing Drilling, Pecking, Tapping and Boring cycles.
- All cycles can now be output as Local Linear as well as the existing Global Linear.

This output produces 3+2 type NC code with work plane support, versus full 5-axis code with tool vectors that is produced by Global Linear. This provides better support for indexing type machines and machines that utilize plane rotation functionality.

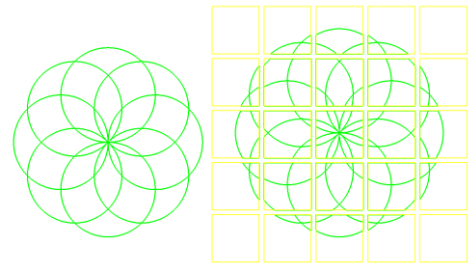


Geometry Paneling

A new Paneling command allows for large geometries to be broken into sectioned pieces and automatically placed within separate panels (sheets).

The resulting panels are automatically gapped apart, similar to nested sheets, and moved away from the original geometries for easy identification and access.

Opened geometries are automatically closed along the panel edges, allowing for easy machining.



Part Modeler Enhancements

- Window Selection Introduced for Remove Face Procedures
 - Allows multiple faces of a feature to be selected easily to allow removal of the "dumb" feature.
 - Allows faces that are FULLY within a window selection to be selected (Left to Right window selection).
 - Allows faces that are PARTIALLY within the window selection to be selected (Right to Left window selection).
- Various enhancements have been made to the Drawing Application within Part Modeler.
 - The introduction of "Force Aligned Parallel" dimension button, found on the "Modifier" Toolbar.
 - The introduction of the "Construction" line button, found on the "Locate" Toolbar. This button is also available in the Model application..
- Active Component indicated in Model Window.
 - When two or more components are present in the model space, the active (selected) component is now indicated in the Model Window by a red tick

General Enhancements

- Simplified product installation
- Many CLS licensing enhancements
- New **BTL Translator** add-in
- Can now import Vero's **VISI** part files
- SolidWorks 2013 part file support
- New **Material Selection** options in **Z Contour Roughing**
- Open elements (**Machine ► Set/Unset Open Elements**) is now available in the **Standard** levels
- **Tool Axis Conversion** enhancements
- **Nesting** enhancements
- Many API enhancements
- Much more...