

## New in SprutCAM, build 7.1.6

1. The 1/2 and 3/4 turn views are now dynamically changing to ensure visibility of insides of a model irrespective to sight direction.
2. There was added "trunc(<val>, <dec>)" operator to postprocessor (rejection of the part number). "<val>" - number, which will be cut, "<dec>" (not necessarily) - decimal code followed by the number would be cut off. If "<dec>" = 1 or 0 - truncate the number after point. Positive "<dec>" - decimal places to point, less 0 - decimal places after point. Examples: trunc(12.1237) = 12; trunc(12.1237, 1) = 12; trunc(12.1237, 2) = 10; trunc(12.1237, -1) = 12.1.
3. Wire EDM - Now it is possible to use faces in the job assignment of a Wire EDM operation. Just select a face and add it into the job assignment either by the Add Cover or by the Add Hole buttons. SprutCAM will automatically recognize a wire EDM feature. So you do not need add sync lines manually when you have a 3d model of a part. Furthermore you can create wire EDM operations by selecting a face and picking a Wire EDM operation from the <New> menu. SprutCAM will automatically recognize the Wire EDM feature you've selected, add into the job assignment and adjust the operation parameters to match the feature parameters (actually only the top and bottom levels are now adjusted)
4. Wire EDM - The <workpiece coordinate system> parameter on the <Setup> panel (G54 etc.) is now supported.
5. Wire EDM - added ability to create a pocketing of areas for "2D contouring" operation. The sample is available for operation "4D contouring" in the case when the curves are the upper and lower contours of the same.
6. Turn operation "Lathe contouring" with job assignment "Roughing" and "Offset contouring" use workpiece for calculation toolpath.
7. Added possibility to set feed of transition (Traversal Feed) for each contour.
8. At "Technology" user can select part of model by color.
9. Force restart SprutCAM when duplicate run SprutCAM with user prompt.
10. 5ax machining - 5D module is two versions: 5D - full; 5DL - light. Light version have some restrictions and low cost. Light version restriction:
  - o Calculation based on - Surfaces, Wireframe or Swarf milling only.
  - o Gouge check - for one tool only.
  - o There are options Multi passes only.
  - o Calculation based on Surfaces:
    - options are not available: cuts along curve, morph between 2 surfaces, parallel to surface.
    - area options are not available: 2D containments, angle range
    - option are not available - machine by lanes
    - option are not available - cusp height
    - options are not available: surface edge handling
  - o Calculation based on swarf machining
    - strategy is not available: sync with main direction.

- options are not available - pattern layers
- option are not available - sorting by layer
- option are not available - compensate to floor surfaces
- pattern slice options are not available - direction
- shift option are not available - gradual for each slice
- tool axis control for 5axis output:
  - tool axis options are not available: not be tilted and stay normal to surface; rotate around axis; be tilted relative to impeller machining layer.
  - advanced options for side tilt definition are not available:
  - run tool options are not available: : at radius; at front; at user defined point.
- Utility
  - feed rate options are not available
  - axial shift option "constant for each contour" only is available:
  - miscellaneous options are not available

11. 5ax machining - 5D module use ModuleWorks 5ax Library Release 2011-08 SP1. New :

- 5axis: Morphed and spiral tool path for geodesic cycle
- 5axis: Spiral tool path for constant-Z machining
- 3axis: offset projection cuts
- Offset direction available for project curves within the triangle mesh tool path calculation
- Swap curves available for swarf machining
- Projection methods available for surface based tool path calculation.
- Flatlands options for constant Z cycle
- Geodesic supports morphed toolpaths and containment curves.

12. Added support Autodesk Inventor 2012 for SprutCAM's Addin for Autodesk Inventor import.

13. Fix problem with reset user defined machine list after reinstall program.

14. Fix bug of destroy project when save it. Project with mesh based model and 5D module operations.

15. Import/Addin manager. Now you can plug external cad file translators in SprutCAM to import file formats SprutCAM does not support by default. Just select the <Addin manager> from the <Tools> menu. In the dialog that appears click the <Add> button and fill the parameters of the external cad translator such as translator name, full path to the translator executable, input and output extensions and command line. After that you will be able to import files supported by the translator.