Predator Virtual CNC™ and CADKEY

Using Predator Virtual CNC and CADKEY to improve productivity

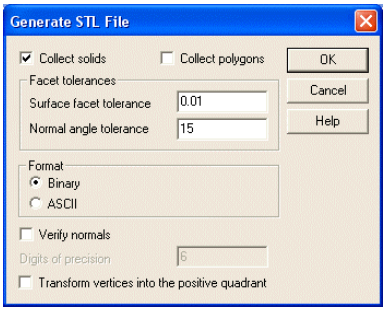
Abstract

This document outlines best practices for sharing data between CADKEY and Predator Virtual CNC. By utilizing CADKEY's solid modeling technology to create 3D parts, castings, molds and fixtures these components can be transferred into Predator Virtual CNC to improve the realism of CNC verification and simulation. We recommend the following procedure:

1. Run CADKEY
2. Open the appropriate 3D solid model
3. Use the Transform commands within the Transform menu to position the model's origin to match the programming origin used with the CNC program
4. From the File menu select Export and then STL
5. The Save As dialog will appear click the Options button
6. Always enable the binary option and uncheck the Transform vertices into the positive quadrant option and click the OK button, see graphic
7. Specify an appropriate STL filename and click the SAVE button
8. Run Predator Virtual CNC
9. Create a Job and add the appropriate CNC program
10. Click the Stock tab and specify either STL Stock or STL Fixture in the pulldown
11. Click the Browse button and select the appropriate STL file; the 3D model will appear in the preview window
12. Finish the Job and run the CNC verification and simulation

NOTE: This process was tested using Predator Virtual CNC v4.1 and CADKEY Workshop V21. V21 or greater of CADKEY is strongly recommended. Previous versions of CADKEY may experience problems with exporting STL files.

NOTE: STL file created in CADKEY can also be used for CAD Compare within Predator Virtual CNC and for modeling a machine's moving parts for machine simulation.



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