Predator Virtual CNC™ - KBA #2300003

Knowledge Base Article for improving CNC verification and simulation

Issue

What machine details are required and which ones are optional for machine simulation?

Solution

The following machine details are required for machine simulation.

- The machine type
- Specifying the appropriate Control or Reverse Post within the Control tab
- STL files for the appropriate machine component
- 4 and 5 Axis machines require the Rotary Tab to be complete and accurate
- Spindle orientation and gage line positions within the Spindles tab
- The Linear Axis Sequence within the Moving Parts tab
- The machine basement within the Moving Parts tab

The following machine details are optional for machine simulation.

- Travel limits within the Travels tab
- Tool change positions within the Travels tab
- Home positions within the Travels tab
- Cycle time parameters within the Time Params 1 tab
- Cycle time parameters within the Time Params 2 tab
- Collision checking per component within the Check tab

NOTE: STL files are not required for every machine component. In other words, if you only need to simulate and collision detect the spindle head and a rotary table that is fine. Only create and specify two STL files. The first STL file will be used for the spindle head and the second STL file will be used for the rotary table.

NOTE: If there are no checked components within the Check Tab, Predator Virtual CNC will not detect collisions of any moving parts.

References

Should additional details be required, contact Predator Software via the following:

support@predator-software.com

© 1994 – 2004 Predator Software Inc. All rights reserved.

THIS IS A LIVING DOCUMENT. The information contained in this document represents the current view of Predator Software Inc. on the issues discussed as of the date of publication. Because Predator Software Inc. must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Predator Software Inc., and Predator Software Inc. cannot guarantee the accuracy of any information presented after the date of publication.

The information in this article applies to:

- Predator Virtual CNC v5.x
- Predator Virtual CNC v6.x

Last Reviewed: 09/29/04