CAM-POST®
NC Post-Processing Solution

CAM-POST® is an advanced independent single source NC post-processing development software supporting all major CAD / CAM / PLM systems, CNC controllers and machine tools. CAM-POST incorporates over 40 years of industry leading NC expertise to deliver the most advanced, intuitive and flexible system architecture available.

CAM-POST Benefit Highlights

Ease of use takes the front seat for a quick & efficient implementation…

CAM-POST includes over 200 NC controller quick-start defaults, which can be selected to simplify and speed post-processor creation. Also, CAM-POST includes a unique comprehensive "point and click" Wizard that allows even the most novice users to generate advanced NC post-processors quickly and effectively. The Wizard easily guides users through all the various steps involved when creating NC post-processors by using illustrated sets of instructions, which provide an intuitive graphical interface for effortless definition of machine kinematics, axis sign conventions, travel limitations and rotary pivot distance offsets.

An instinctive, knowledge-based methodology…

CAM-POST provides a "Navigator" that organizes post development into broad categories and more specialized subcategories. A "Modification Wizard" provides access to a subset of the complete development environment, exposing only those post-processor specifications most likely to require review. CAM-POST's extended depth enables customers to handle complex situations by providing simple responses, rather than having to design and develop logic using macros.

Increased NC Programmer productivity and manufacturing process efficiency…

CAM-POST "Visual Debugger" traces and synchronizes the CL file input, NC code output, macro code and diagnostic messages produced during post-processing. The user can view or change any post-processor variable on the fly, in a single integrated workbench. Breakpoints can be set and cleared with the mouse pointer on CL records, macro source, when variables change or when certain blocks are produced. CAM-POST management capabilities include: full do/undo to support for multiple revisions of the post-processor to compare different post versions with "links" to directly jump to differing post specifications; full-time on-line help and a "quick test" button to immediately see the NC code effect on changes for easy experimentation.

Custom NC Post-Processors

Also available, custom NC post-processors, created by ICAM's senior NC manufacturing experts, that are developed to optimize the performance of CNC machines and to allow users to benefit from advanced functions of their respective machine tools.

ICAM's custom NC post-processors are created using CAM-POST; therefore, these posts inherently interface with all major CAD / CAM / PLM systems, controllers and CNC machines & support various advanced multi-axes machining applications. All ICAM post-processors can also be configured to support multiple CAM systems.
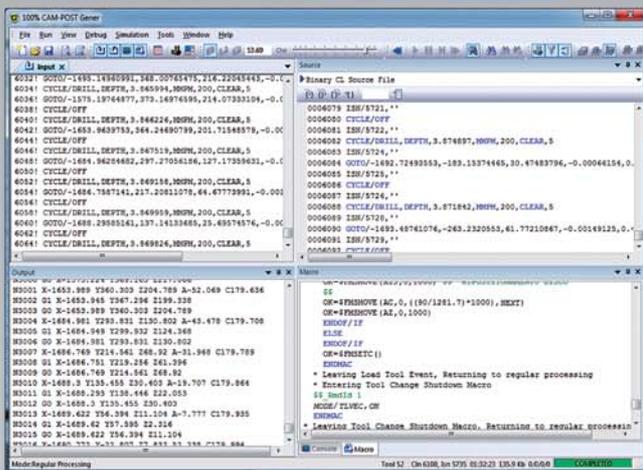
GET INTEGRATED PSE

Advanced Post-Processing & Multi-Axes Specialization

Embedded CNC optimization technology delivers improvements to part quality, production output and reduced cycle time - the real measure of a post-processor can be taken from the quality of NC Code it produces. Several of CAM-POST most powerful features, providing the user with on-demand access to advanced functionalities in the multi-axes machining world, are outlined below.

Advanced Linearization… provides the user with controls at the tool tip as well as tool wobble (angular) controls. Linearization can be performed based on the expected tool gauge length. The user can optionally linearize RAPID motions as well.

Rotary-Turn-Around (RTA)… is logic that can retract a tool from the material and reset to the alternate pose when rotary or linear travel is exhausted during continuous machining. Rotary axis winding and pre-positioning features provide extended uninterrupted 5D cutting. Preferred rotary positioning can be used to ensure better operator visibility or to enforce a consistent 5-axis pose where possible.

Path Planning… uses look-ahead to automatically select the best path during the rapid positioning motion, to avoid the requirement for rotary-turn-around if possible. Path planning also prepositions rotary axes that are parallel to the tool if it discovers that they must be rotated midway through a continuous cut.
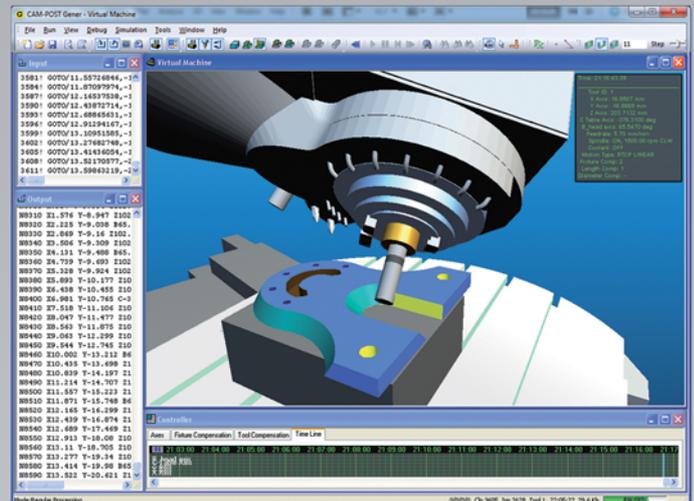
Rotating Tool Center Point (RTCP)… is a feature of advanced controllers that permit the user to output tool tip coordinates instead of control point coordinates. RTCP programming supports actual axes, vector, dual point, Euler, RPY or virtual axes rotary control methods. The control computes the kinematics and handles linearization, with the benefit of simpler and more transportable programs, as well as full 5D tool compensation.

Local Coordinate Frame Transformation (LCS)… CAM-POST supports translation, rotation, scale, mirror and additive transformations. Activation of coordinate frames can be set automatically, whenever the tool orientation changes, or can be set on demand. LCS also includes recognition of preferred coordinate frame hints from the CAM system. All travel, feed and timing calculations continue to be based on the true physical configuration of the machine.
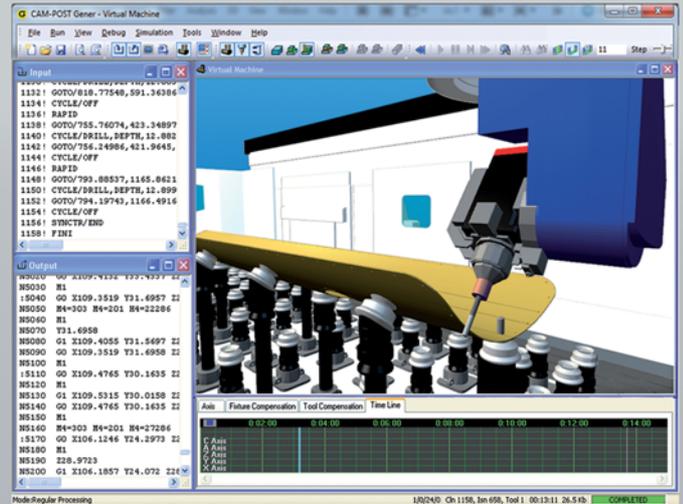
Integrated PSE offers an array of new features

- Support for 3D tool compensation
- Support for positioning/continuous B axis when turning
- Supports probing and part-transfer of in-process stock
- Advanced Timeline presenting more info on simulation process (tool change, coolant, sub-programs, etc…)
- Support for merging lathes and multi-control workcell applications
- Supports Windows 8