

Camand® Wire EDM

for Microsoft® Windows NT™ and UNIX®

*Create 2-axis,
2½-axis, 4-axis,
and 5-axis
EDM toolpaths
to accommodate
many different types
of wire EDM machines
and EDM geometry.*

Camand Wire EDM

Camand® Wire EDM software allows you to create toolpaths for traveling wire electrical discharge machines (EDM). The software is designed for maximum versatility to accommodate many different types of wire EDM machines and EDM geometry. Camand Wire EDM can be used to create 2-axis, 2½-axis, 4-axis, and 5-axis EDM toolpaths that take advantage of the specific features of your wire EDM machines. You can machine closed cavities (dies), closed cores (punches), and open profile curves with or without tapering.

The input to Camand Wire EDM is one or two input curves. If one curve is selected, then 2-axis machining is performed. A single curve may also be machined with a constant taper. If two curves are selected, they are used as an effective ruled surface to be cut. In this mode, the angle of the wire changes dynamically, dependent on the tangency of the wire against the two selected curves. Optionally, synchronization lines can be used to align specific locations on the two curves. If the upper curve

is non-planar, the 5th axis capability is used to control the upper wire guide position to optimize flushing of the burned material.

Multiple passes may be generated along any selected contour. Multiple start and stop points may be used along the contour to provide slug support. Multiple thread/start/stop points may be selected, causing the roughing pass and skim in kerf passes to cut the wire and reenter at the next thread start point.

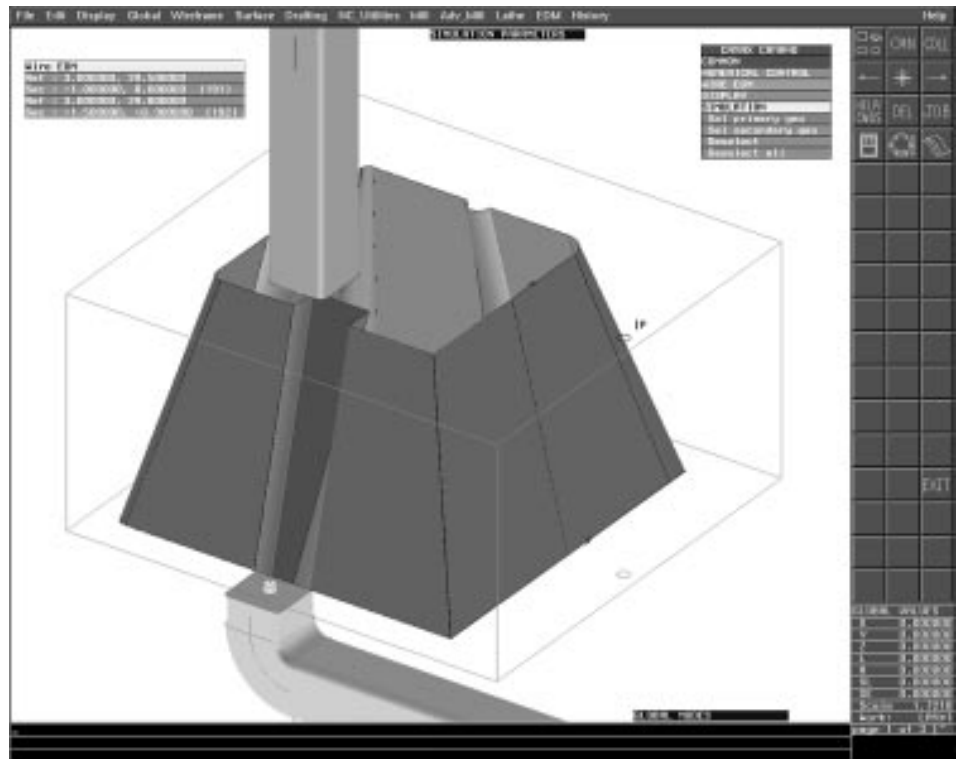
Intervention points on the contour may be selected where a command is executed to insert offset changes, different generator settings, taper changes, or other items into the toolpath at those locations. This provides

flexibility and control in the resulting wire program.

Cutter compensation for the wire can be provided as part of the wire program or manually on the machine control. Camand Wire EDM will vary the program data based on the cutter compensation option selected.

Simulation

Camand Wire EDM contains the capability to simulate the wire motion in either wireframe or shaded mode. Geometry may be selected that represents the upper and lower wire guides. During simulation, the wire display (not the wire guides) will be blanked if the wire is cut, and redisplayed after the wire is



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threaded. The wire will be displayed in the “rapid” color when it moves with the generator turned off.

Integration

Camand Wire EDM is fully integrated with all the other Camand software packages. As a result, it takes full advantage of Camand’s modeling, dynamic display, dynamic simulation, and 3-D database capabilities. Also, if the part you are making with Camand Wire EDM requires other types of machining, the same model can be used for turning or 3-, 4-, or 5-axis machining, without the need to exit from the Camand software.

Post Processor

Option files to configure the post processor are included with the Camand Wire EDM package. These include option files for AGIE, Charmilles, and Mitsubishi. Additional option files can be created for any other type of wire EDM machine, using any of the included option files as templates.

Visualization

Camand Wire EDM provides many visualization tools to ensure that the resulting wire program machines properly. Minimum radius corners can be graphically highlighted to alert the user where changes to the program may be necessary. Wire incline limits can be specified in the machine configuration file and graphically highlighted when exceeded. Shaded images of interpolated machined contours may be displayed to provide visual verification of the wire program.

Call Today

For more information on how Camand Wire EDM can contribute to your productivity and profits, call your local CAMAX dealer. For dealer information, contact CAMAX at (800) 394-5300 or (612) 854-5300.

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