Camand® Lathe
for Microsoft® Windows NT™ and UNIX®

Generate toolpaths for 2- and 4-axis NC lathes for turning, threading, facing, grooving, boring, and backfacing.

Camand Lathe

Camand® Lathe software is used to generate toolpaths for 2- and 4-axis NC lathes for turning, threading, facing, grooving, boring, and backfacing. Camand Lathe uses a 2-D part profile curve and allows the user to indicate the lathe operation to be performed on segments of the profile. Lathe is divided into four options: Roughing, Finishing, Grooving, and Threading.

Lathe Roughing consists of multiple roughing cuts in a selected direction between a material curve or bar stock and a part curve. Since Camand Lathe checks the tool and relief angles, the roughing tool motion defined will remove as much material as possible without violating the finish geometry.

Lathe Finishing consists of following a selected part curve, or selected sections of the part curve, based on a limit angle.

Lathe Grooving provides the ability to create grooves automatically by entering a width and depth value, combined with a radius or chamfer definition. Grooves with angled walls

can also be defined. Tool compensation for either side of the tool can be set independently.

Lathe Threading consists of linear moves synchronized with the spindle index to cut inside, outside, taper, or scroll threads. Spring passes and gage passes can also be programmed in Threading.

Various options allow you to control the tool entry into and out of the material for maximum machining efficiency and tool life. These options are available for all of the different machining operations.
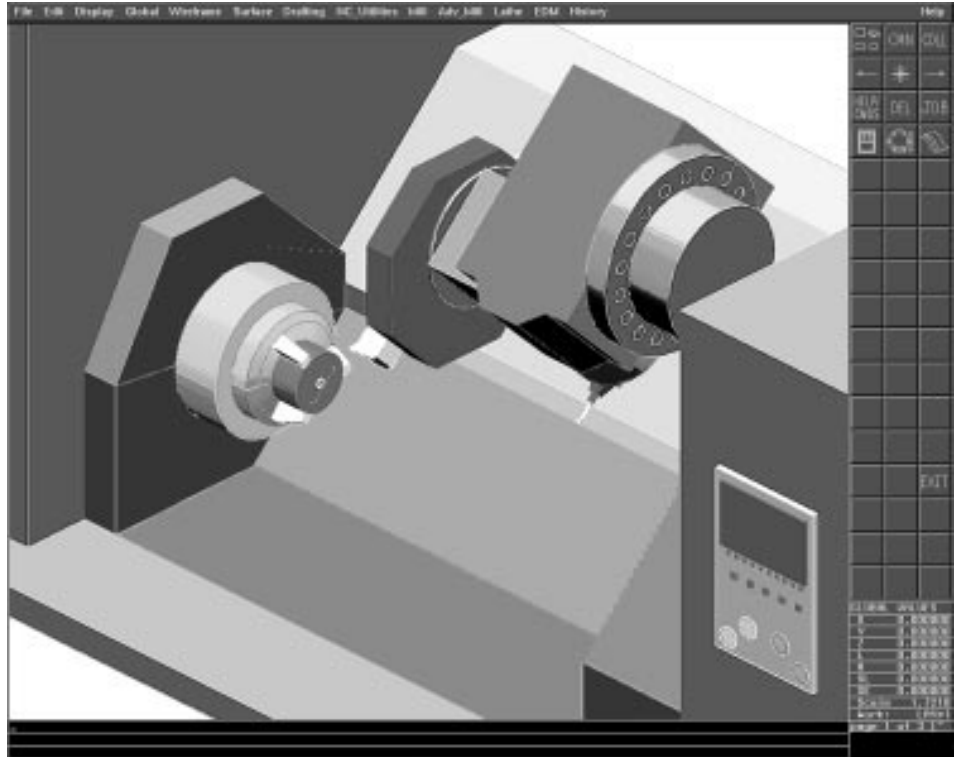
Simulation

Camand Lathe has the ability to simulate the motion of the lathe tool, holder, turret, and the part being cut. When programming a 4-axis lathe, the synchronized motion of both turrets, relative to the part, is simulated. Custom synchronization of the two turrets can be performed to obtain the most efficient machining. Simulation can be done in wire-frame mode or a fully shaded display.

Integration

Camand Lathe 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. If the job you are working on requires other types of machining in addition to lathe, the same model can be used for 3-, 4-, or 5-axis machining, or wire EDM machining, without ever needing to exit from

Camand Lathe has the ability to simulate the motion of the tool, holder, turret, and the part being cut.

the Camand software. This provides the milling and turning capabilities necessary to program Millturn machines.

Productive Coexistence

Since Camand lathe exchanges data with virtually any other CAD system, you can expand your modeling and manufacturing options by integrating Camand Lathe into your operations. Through IGES, VDA, DXF, and other direct translations, Camand can leverage the investment made in geometric models created on other systems. Your existing CAD/CAM/CAE environment remains intact to protect your investment in software, hardware, and internal operations.

Post Processor

Option files to configure the post processor are included with the Camand Lathe package. These option files can be used to create output (or new option files) for almost any lathe on the market.

Customization

By using the Camand user programming language (CPL), you can create and enforce processes that address your company's machining standards and even automate repetitive functions. The system's cutter library lets you create your own "tool crib" within the system. You can customize Camand Lathe into a system that is programmed for your manufacturing operations.

Call Today

For more information on how Camand Lathe 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.

CAMAX
SDRC's CAM Business