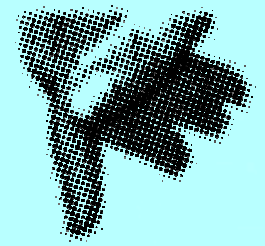


# Applied Computing & Engineering Ltd

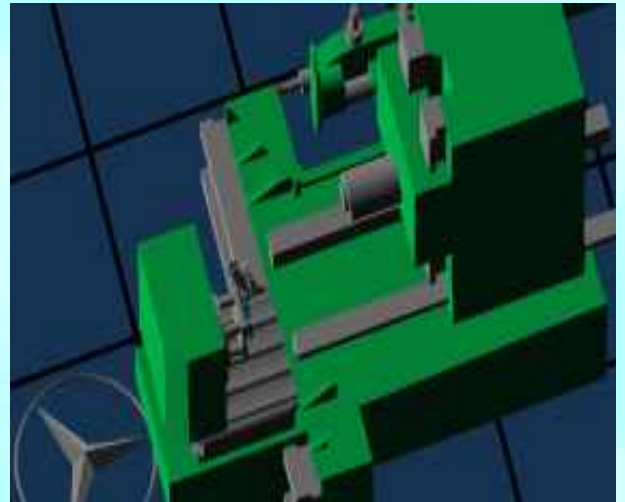
Design & Manufacturing Simulation



SoftMachines is **the** software tool for NC programmers to verify post-processed machine code. With SoftMachines, you can visualize in real-time the entire machining operation, including tools, fixtures, palletizers and parts.

The simulated machine's tool motion can be used to verify part programs and reduce prove out time leaving the real machine tool available for production. SoftMachines can be used to prove out programs for any NC machine tool.

If a you can build it, SoftMachines can simulate it, however the most effective use for SoftMachines is with large often complex machines making expensive parts and assemblies.



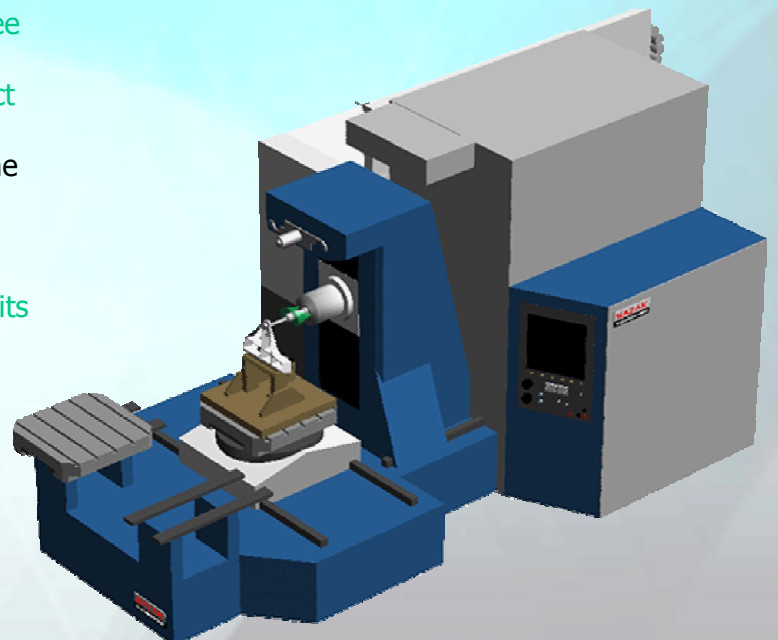
## Easy to Use

SoftMachines is intuitive and easy to use. You can enter tooling information graphically and store it in tooling libraries. You can quickly and easily set up machines, and import parts and fixtures from existing CAD databases.

Your existing machine code data requires no modification and can be loaded straight into SoftMachines. Once you execute the program, machining errors are automatically logged in a detailed error report.

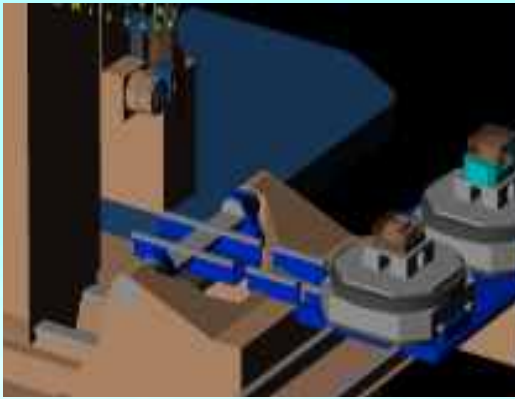
## SoftMachines discover

- If your programme will run **collision free**
- How your **machine components interact**
- How **long** your part will take to machine
- If the tool **set-up is correct**
- If your machine tool will **exceed its limits**
- If the **post-processor** is correct
- How **part fixturing** should be set up



## Low Cost Alternative

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SoftMachines operates exactly like the real machine by executing G and M codes on simulated machines, tools, parts and fixtures, providing an accurate verification of the part program before it's run on your real machine. This frees your machine tools for production, eliminating the risk of equipment damage from collisions and the costly disruption this causes.

Executing your programs in the same manner as your actual machine, SoftMachines has identical accelerations, feed rates and full machine kinematics. With simulated tool changers, optional material handling equipment and a machine controller emulator, and the ability to load

tool assemblies from your existing databases or create new ones from libraries of individual tools, adapters and holders, it can provide an exact replica of your machine however complex.

As a genuine low cost alternative to dry runs on the production floor, SoftMachines increases machine capacity by minimizing disruptions to your production schedules. SoftMachines easily handles non-production activities, protecting your expensive equipment.

## SoftMachines Features Include

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- Support for all types of machining equipment, 3, 4, 5 and 5+ axis
- Multiple turrets and spindles
- Tool changers, rotary tables and other auxiliary equipment
- Complete tool assembly set-up of multiple tools, holders or adapters
- Parametrized graphical tool modelling
- Complete controller emulation
- Support for custom G and M codes and canned cycles
- Machine tool control panel for manual operation
- Cycle time and machining cost estimation
- Batch or interactive execution mode
- Automatic collision detection
- Detailed error log reporting

## Introduction to AC&E

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AC&E has been applying simulation technologies to a wide range of design and manufacturing applications found in aerospace, automotive, defence, power, polymer and other engineering organisations. Our manufacturing simulation software provides easy and accurate access to preparing and verifying (often) complex programmes for specialist equipment, robots and other expensive machines.

### APPLIED COMPUTING & ENGINEERING Ltd Design & Manufacturing Simulation

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