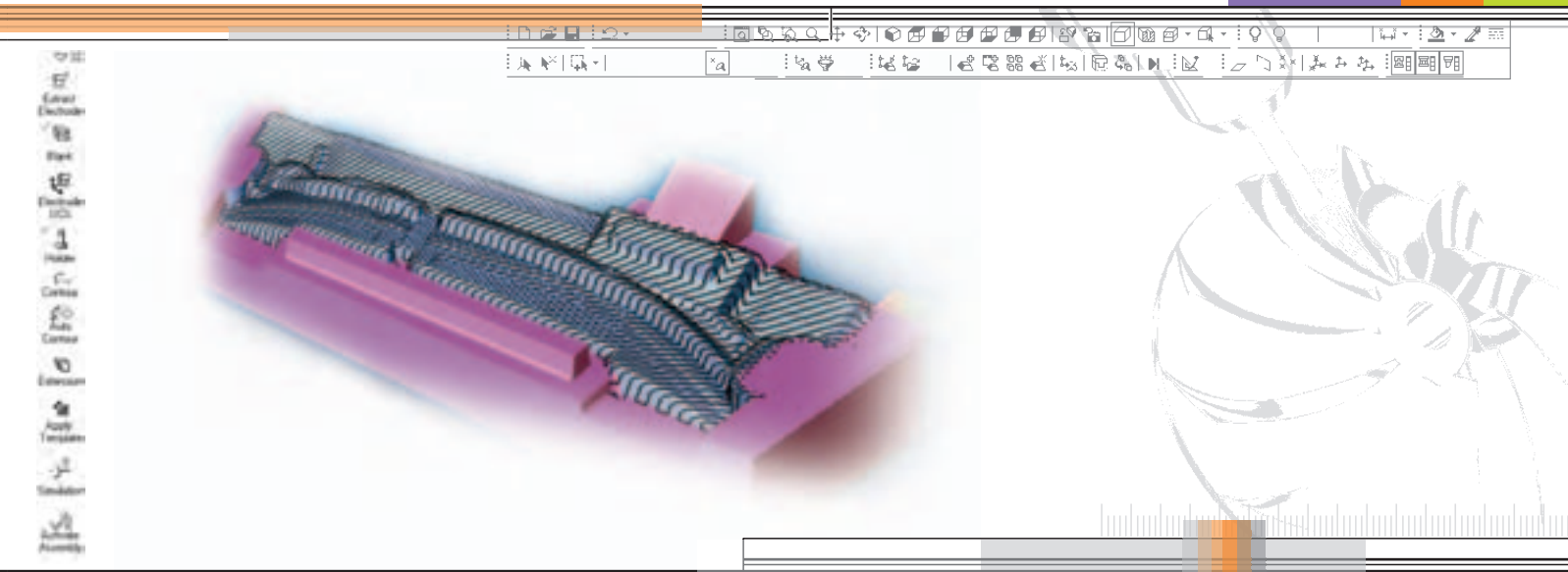


CimatronE NC

Rapid delivery without compromise



A complete solution for NC – from 2.5-axis to continuous 5-axis, from micro milling to large bumpers

Optimized tool paths lower machining time and reduce tool wear-and-tear

The right combination of automation and optimal user control shortens programming time

Superior surface quality



No Compromise

In today's shop there's no room for compromise.

Clients expect excellent surface quality and short delivery time – often while changing models well into the machining process. To stay competitive, you need to program and machine any part, quickly and efficiently. You need a solution

that automates key processes for speed, yet leaves your users firmly in control.

Enter Cimatron. A world leader in CAD/CAM solutions since 1982, Cimatron delivers the only NC solution that offers your shop no compromise – no compromise on quality and no compromise on time to delivery.

Machine Any Part

CimatronE NC delivers the confidence of knowing that you can machine any part, period. From the routine to the complex, and everything in between, Cimatron takes the guesswork out of on-schedule, on-budget delivery.

From simple 2.5-axis milling and drilling to complex 5-axis machining – CimatronE NC provides the full range of technologies needed to get the job done.

Advanced Micro Milling and Aerospace Milling

CimatronE NC thrives in highly-demanding manufacturing environments like aerospace and micro milling. A dedicated aerospace application provides full-user-controlled 5-axis milling with automated monitoring of tool and holder collision check with the part, remaining stock and fixtures.

For miniature and high-precision parts – the CimatronE NC micro milling application is optimized to cut parts down to 0.1 mm with tolerances as tight as 0.00001 mm – resulting in superb surface quality.

Maximum Control

CimatronE NC complements the knowledge and experience of NC programmers. It offers the right combination of automation and hands-on decision-making power.

While initial steps can be quickly accomplished with user-friendly guides and reusable templates, control over all functionality remains firmly in the experienced hands of the programmer.

Advanced template functionality further automates programming, allowing reuse of specific procedures and even complete machining processes. Easy template management helps retain crucial company knowledge – capturing expertise and know-how for later use.

Highly-Productive Working Environment

Designed with your users, your timeframes, and your market in mind – CimatronE NC was built for productivity, offering:

- Rich CAD functionality built into the NC environment
- An integrative solution – eliminating data interface hassles while effectively supporting changes
- High level of automation combined with maximum user control
- Intuitive user interface makes the right tools available at the right time and in the right place on the screen

Flexible 2.5 Axis Solution and Knowledge-Based Drilling

CimatronE NC includes a knowledge-based automated drilling application, QuickDrill, designed to operate using any data – solids, surfaces and 2D/3D wire-frame. QuickDrill automatically creates an optimized drilling process – recognizing holes and applying pre-defined drilling sequences according to company standards.

CimatronE NC 2.5-axis functionality supports any number of input contours, draft angle and entry control, and 5-axis positioning to reduce setup time.

Efficient Roughing Functionality

CimatronE NC's powerful 3-axis roughing solution creates a highly-efficient toolpath by adapting machining strategy to part geometry and actual stock.

CimatronE NC maintains a constantly-updated model of remaining stock. This allows the system to generate efficient toolpaths – including second rough operations – minimize air motions, create safe and minimal approach and retract motions, and adjust feed rates according to actual tool load.

High Quality Finishing

CimatronE NC's robust 3/5-axis finishing application provides high surface quality for any model shapes using optimized machining strategy.

Based on slope and curvature analysis, part geometry and tool accessibility, CimatronE's finishing machining strategies include:

- Adaptive Z layers
- True spiral motions
- All rounded motions
- Flow-line machining
- Cleanup (rest machining) and pencil
- Slope controlled finishing

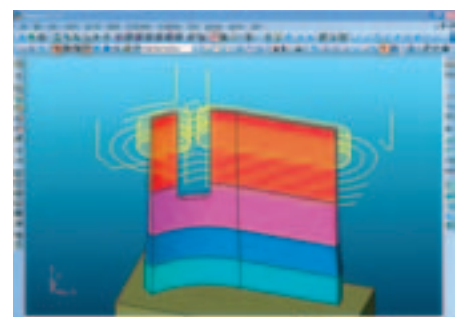
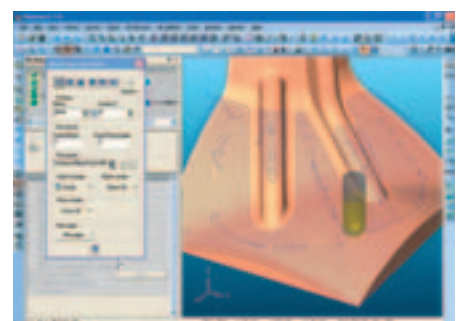
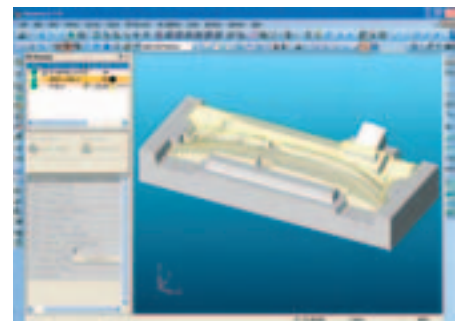
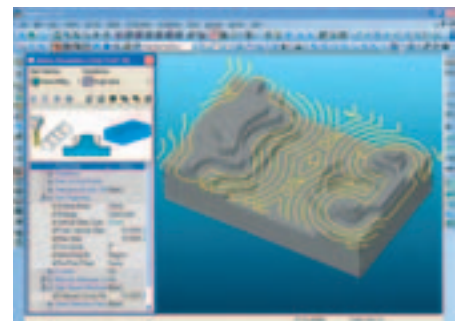
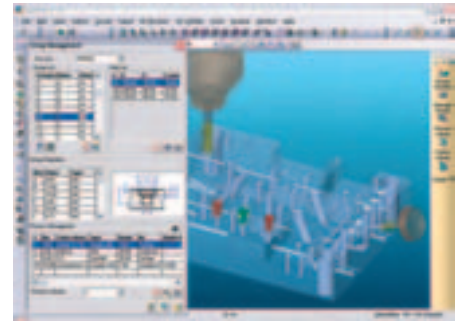
Productive High-Speed Milling

For highly-productive High-Speed Milling (HSM), polish-less surface quality, and long tool life – CimatronE NC provides many advanced features. The system generates an all-rounded toolpath with constant tool load, including trochoidal milling, advanced clean between passes, and state of the art ridges removal.

Effective Electrode Machining Solution

CimatronE NC is the most complete solution for designing, documenting and manufacturing EDM electrodes. The system provides machining strategies optimized for electrode machining, including parameters to compensate for spark gap, 2D/3D orbiting, as well as utilizing flat cutters with negative offset.

With built-in milling templates, a complete machining process can be implemented on any geometry with a single mouse click, including dedicated machine processes for ultra-thin electrodes.

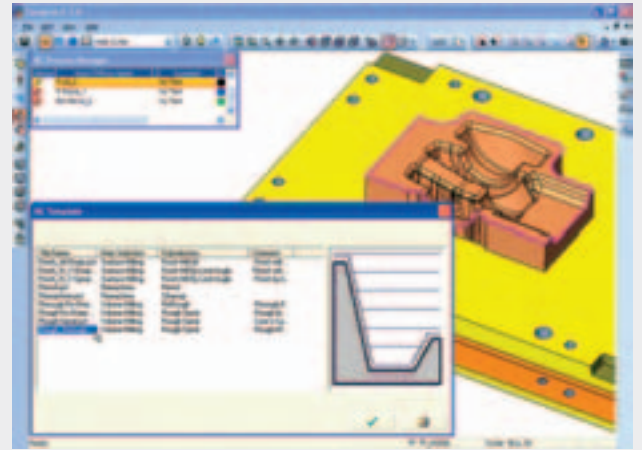


NC Lite – Easy to Use Shop Floor Solution

Listening to the needs of shop owners worldwide, Cimatron created an easy to learn and easy to use shop floor solution. Simple and flexible with a unique user-defined level of automation, CimatronE NC Lite incorporates the full power of CimatronE NC algorithms, and is ideal for both novice and advanced users.

CimatronE NC Lite is the ideal solution for shop floor programming. From drilling and 2.5-axis milling, to full 3-axis milling and 5-axis positioning, NC Lite provides a complete and powerful shop floor solution. Simple and medium-complexity jobs can be quickly programmed on the shop floor, from rough to finish – saving time and cost, without sacrificing quality.

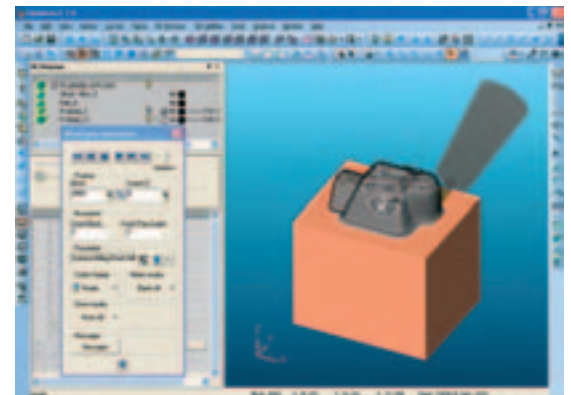
For more challenging tasks, advanced users enjoy full compatibility with CimatronE NC – including smooth sharing of toolpaths and procedures between the systems. NC Lite can be easily upgraded at any time to the full CimatronE NC solution.



Full 5-Axis Functionality for Tooling

CimatronE offers an integral fully-featured 5-Axis solution, taking an advanced and innovative approach to:

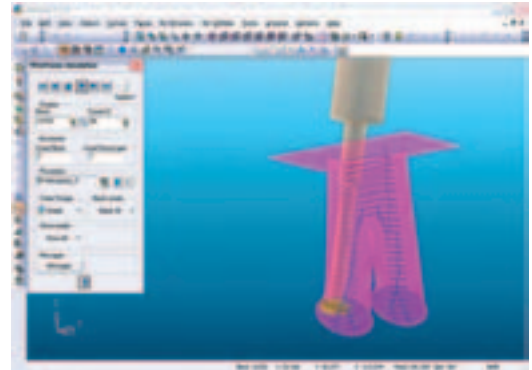
- **5-Axis Positioning** – CimatronE NC saves machine setup time, by offering multiple setups for drilling and milling, including a special 5-axis connection function.
- **5-Axis Tilting** – CimatronE NC's touch-of-a-button 5-axis tilting solution is especially suitable for rapid machining of parts with deep cavities, narrow ribs and tiny corner radiuses, using shorter and more rigid tools for best surface quality and reduced machine time.
- **5-Axis Trimming** – For cutting excess material from vacuum-formed parts, CimatronE NC provides users with fully-controlled 5axis trimming.
- **5-Axis Visualization** – CimatronE NC's advanced simulation capabilities for 5-axis material removal and complete machine kinematics allows operators to review the machining process in a realistic environment prior to manufacturing.



Advanced 5-Axis Milling for Aerospace

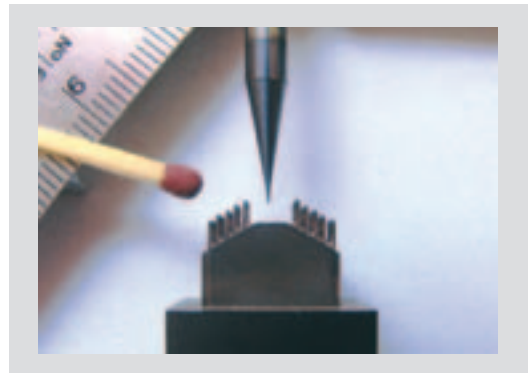
For demanding aerospace and other highly-exacting production environments, CimatronE NC provides a powerful 5-axis milling application. The solution gives the user full control over tool motions and tool axis orientation, and includes tool and holder collision check with the part, remaining stock and fixtures.

CimatronE NC offers a large variety of 5-axis roughing and finishing functions to accurately machine parts like: impellers, turbine blades, ship propellers, cylinder heads and inlets, and cutting tools.



Advanced Micro Milling

More and more fields (medical, optics, computer components, etc.) depend on the ability to cost-effectively manufacture very small, high-precision parts and matching molds. Based on dedicated micro-machining strategies, CimatronE NC micro milling generates superb surface quality within tolerance as tight as 0.00001 mm using cutting tools with diameters down to 0.1 mm.



The Right Balance of Automation and Manual Control

CimatronE NC offers maximum NC programming automation, while still leaving operators firmly in control. With template automation, complete high-efficiency NC programs can be created in minutes. At the same time, a rich set of advanced parameters enable full manual control of toolpath strategy and machining conditions.

Rich Built-in CAD Functionality

Ability to mend imported geometry is key for a CAM solution. CimatronE NC integrated CAD mode allows the NC programmer to easily overcome geometry issues such as capping holes, applying drafts, rounds and surface extensions, and to create additional geometries (surfaces and contours) required to optimize machining.

An Integrative Solution

CimatronE is a best-in-class integrative solution, supporting each and every stage in the tooling process – from receipt of data from the customer, until parts are machined and assembled. This broad scope of functionality allows users to go through the complete design and manufacturing process without any data conversion.

Efficient Change Management

Keeping in mind real-world concurrent engineering considerations, CimatronE NC features excellent support for on-the-fly design changes, including: Seamless integration with CAD, eliminating the need for data interface and providing better geometry change handling.

World-Class Customer Support

Cimatron understands that in the complex CAM arena, a solution is measured by both its functionality and the quality of its customer support. That's why the dedicated, service-oriented Cimatron support engineers we employ at our support centers worldwide are all professionals like you, with hands-on experience. Cimatron implementation teams ensure that our solutions are fully suited to the way your company works. In addition to process consulting and adaptation, Cimatron offers custom development of post-processors to exactly match any company standards, including 4-and 5-axis post-processors for any machine.

What customers are saying...

"With over 25 years of NC programming behind me, CimatronE really gives me the flexible tools I need to carry out 2D and 3D milling, electrode extraction and documentation. CimatronE is a strong, versatile solution that efficiently handles all the jobs in our tool shop. CimatronE gets my vote!"

Lars Gynthe Sorensen, Oticon, Denmark

"CimatronE allows us to automatically create original detailed NC operator reports, improve our efficiency in creating NC programs, and reduce mold production lead times. This is what makes a reliable CAM system."

Izumi Yamaoka, Shimano, Japan

About Cimatron

Cimatron (NASDAQ: CIMT) is a leading global provider of CAD/CAM software solutions to the manufacturing market. Cimatron enables mold, die and tool shops to optimize processes and shorten delivery times. From quoting to delivery, in the design room and on the production floor, Cimatron helps toolmakers stay competitive. More than

8,500 tools shops worldwide use Cimatron's leading CAD/CAM solutions to deliver quality products at lower costs and reduced cycle times. Cimatron's subsidiaries and extensive distributor network are located in over 35 countries to serve customers worldwide with complete pre- and post-sales support.

For more information, please visit our web site at:
www.cimatron.com

