

# *Cimatron***E**

## 5-Axis Milling

Advanced 5-Axis Milling  
for Production



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Cut machining time and  
improve quality

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Enjoy flexible automation

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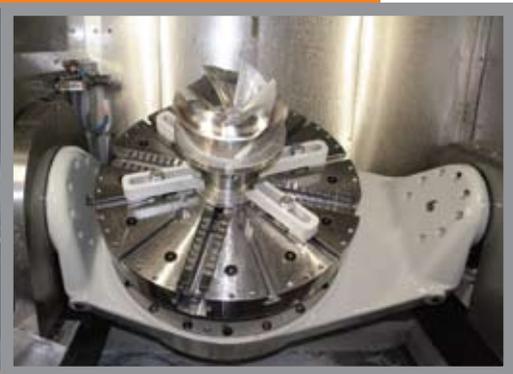
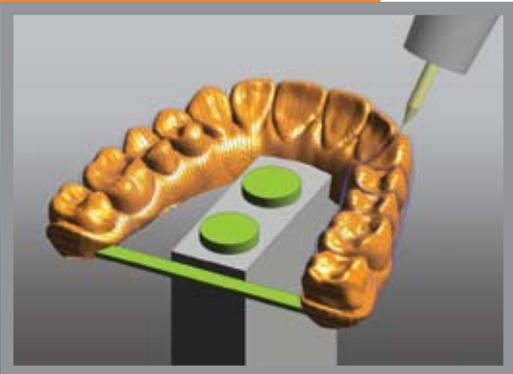
Machine with confidence using  
machine simulation

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Post processors for any  
machines and controllers

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 *Cimatron*  
G R O U P

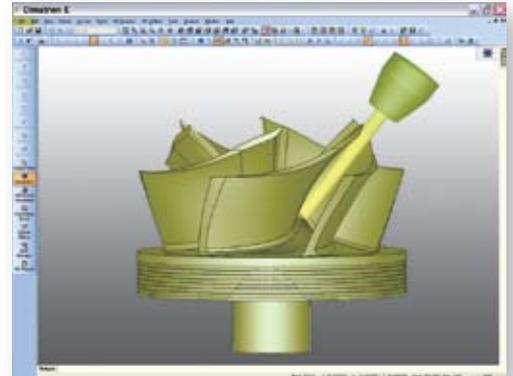
## Complete any 5-Axis Job

Today's manufacturers are challenged with the task of manufacturing a large variety of complicated parts in small production series. The key to profitability depends on achieving perfect machining results in the first try. That means effective programming, short engineering setup time and safe, efficient toolpaths.

CimatronE 5-Axis Milling offers you the confidence of knowing that what you see on the screen is exactly what the machine will produce.

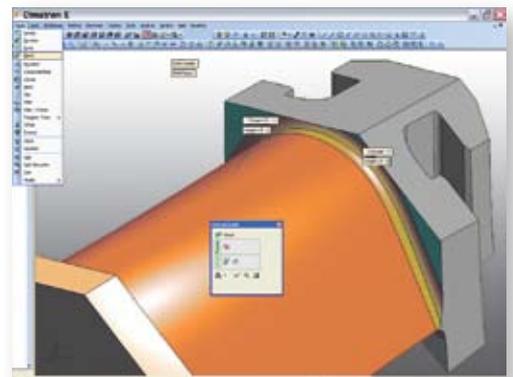
CimatronE 5-Axis Milling can program any job, including:

- Impellers, turbines, blades and blisks
- Ports and inlets
- Rubber molds
- Complex parts
- Cutting tools
- Aerospace structural parts
- Dental and medical prosthetics
- Patterns and models
- Micro milling



## Powerful Built-in CAD Tools

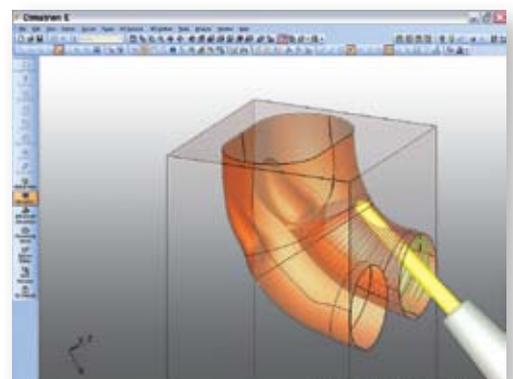
Built-in CAD mode with robust surfacing capabilities allows the NC programmer to optimize machining by adding surfaces and contours and easily correcting geometry issues by capping holes, applying drafts, rounds and surface extensions as well as guiding curves and splines.



## Rich Machining Strategies Library

CimatronE 5-Axis Milling includes a large library of machining strategies, supports a full range of cutters - including taper, lollipop and slot mill - and enables:

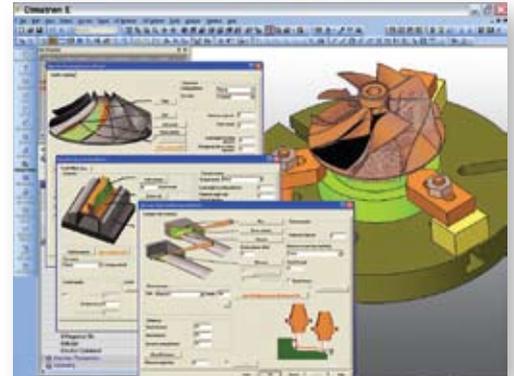
- Safe 5-axis rough cutting on any stock shape with short cycle time
- Flexible strategies for top quality 5-axis finish cutting
- 5-axis tilting for machining complex geometries with short conic tools
- 5-axis contour milling and drilling
- 5-axis text engraving
- 5-axis micro milling for miniature electronic and medical parts



## The Right Balance of Automation and Manual Control

Cimatron offers automation for quick programming, while still enabling operators to use a rich set of advanced parameters to control toolpath strategy and machining conditions including tool orientation, clearance area, entries and exits, links between lanes and layers, collision avoidance, and connection motions between operations.

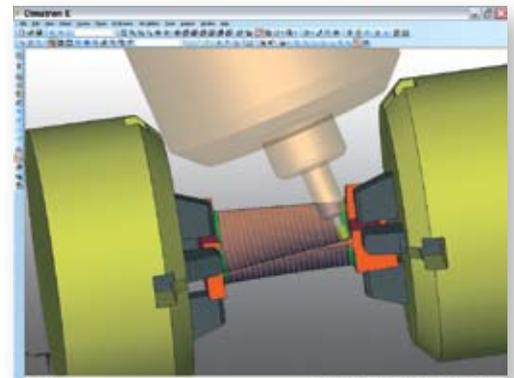
To save programming time when machining a family of parts such as blades, inlets, impellers, etc., CimatronE 5-Axis Milling includes dedicated applications as well as the ability to save and load user defined machining process templates.



## Effective 5-Axis Collision Avoidance

With highly-versatile built-in collision avoidance functionality, CimatronE allows checking for collision of tool, shank and multi-stage holder against the part, stock, fixtures and the machine - generating safe and smooth tool motions, and featuring:

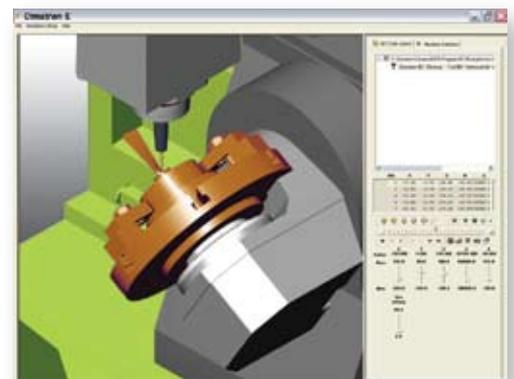
- User-defined safety margins from stock and fixtures
- Automatic modification of tool orientation
- Removal of problematic motions
- Retraction of tool along tool-axis or in any direction
- Smooth changing of tool orientation (tilt/lead) to prevent collision



## Advanced Machining Simulations

To generate efficient toolpaths that run safely, CimatronE realistically simulates the machining process, visualizing tool motions in the actual machine environment including:

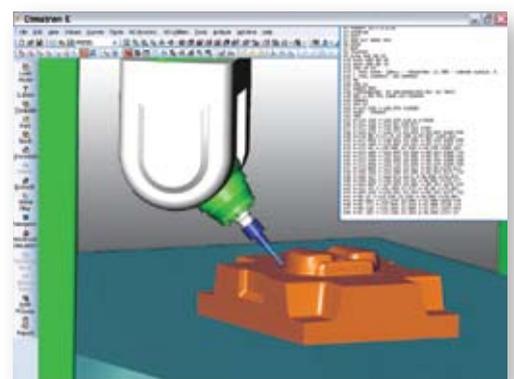
- Visualize machine kinematics
- Collision detection
- Material removal simulation
- Remaining stock simulation
- Toolpath Verification based on post processor output



## Post-Processors for any Machines and Controllers

A rich library of post-processors is offered for leading 5-Axis machines and controllers.

CimatronE state-of-the-art post-processor, can be easily customized to address any specific technological and applicative need.





Advanced 5-Axis Milling for Production

“With CimatronE 5-Axis Milling, we can handle every kind of geometry with optimized machining strategies. The flexibility and power of this tool allow us to quickly produce the most complex toolpaths while improving our productivity.

CAM Srl, Bologna, Italy



## About Cimatron

With over 25 years of experience and more than 40,000 installations worldwide, Cimatron is a leading provider of integrated, CAD/CAM solutions for mold, tool and die makers as well as manufacturers of discrete parts. Cimatron is committed to providing comprehensive, cost-effective solutions that streamline manufacturing cycles, enable collaboration with outside vendors, and ultimately shorten product delivery time.

The Cimatron product line includes the CimatronE and GibbsCAM brands with solutions for mold design, die design, electrodes design, 2.5 to 5 axes milling, wire EDM, turn, mill-turn, rotary milling, multi-task machining, and tombstone machining. Cimatron's subsidiaries and extensive distribution network serve and support customers in the automotive, aerospace, medical, consumer plastics, electronics, and other industries in over 40 countries worldwide.

Cimatron is publicly traded on the NASDAQ exchange under the symbol CIMT.

For more information, please visit our web site at:

[www.cimatron.com](http://www.cimatron.com)



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