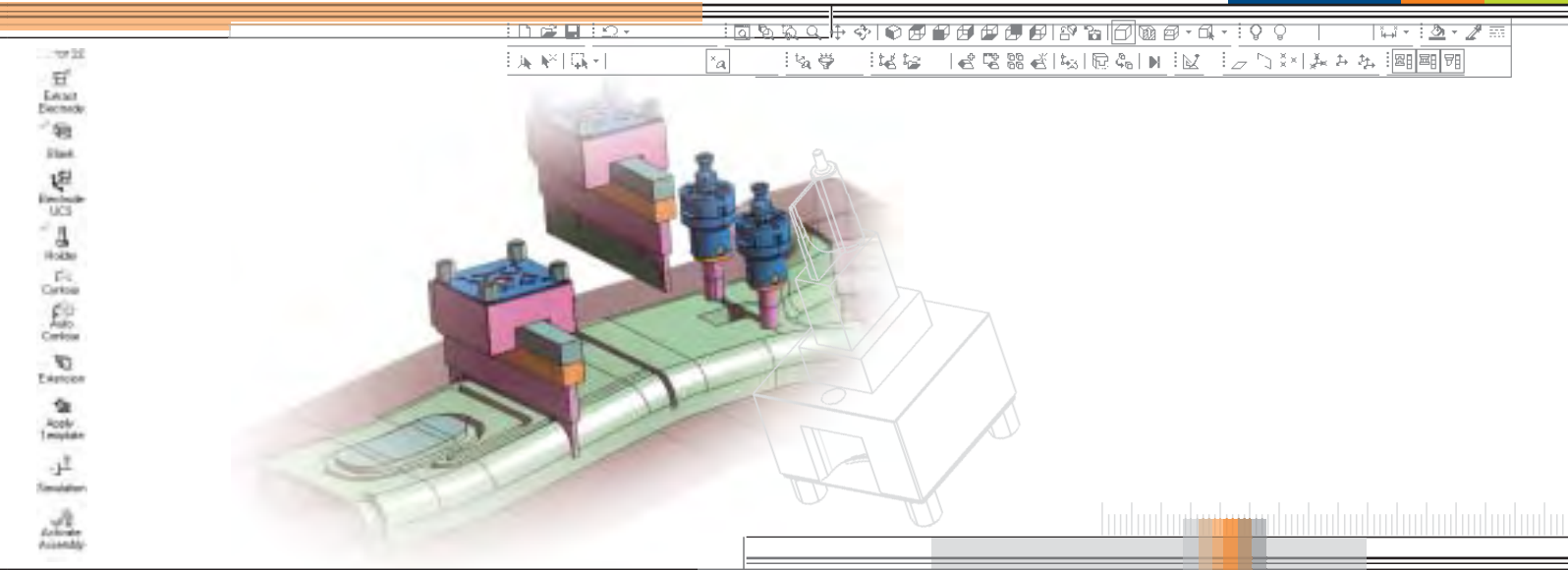


# CimatronE Electrode

Comprehensive electrode design and manufacturing with a difference



Field-proven solution, optimized for rapid end-to-end electrode design and manufacturing

High quality, efficient machining of any electrode in minimal programming time

Raises productivity and dramatically shortens the EDM cycle



## The Cimatron Difference

You know the difference when you see it. You can spot a quality solution created by a veteran vendor with hands-on electrode experience. The first time you use it, you can tell that the people that created this solution know electrodes like you do.

That's the Cimatron difference.

Cimatron understands that the design and manufacture of electrodes is one of the most specialized and delicate processes in the manufacturing cycle. It's not a place for amateurs, or second-best results.

To handle ever-increasing quality demands, and ever-tighter budget and time constraints, Cimatron introduces the first end-to-end electrode solution. From design through production, from documentation to burning, the CimatronE Electrode Solution offers you:

- **Higher Productivity and Faster Delivery**  
By automating time consuming processes like geometry extraction and documentation, lowering EDM setup time, and enabling realistic simulation prior to production and burning, the CimatronE Electrode Solution increases productivity, lowers overhead and reduces human error.
- **From Design to Production**  
The CimatronE Electrode Solution is the only end-to-end electrode solution to provide world-class CAD and CAM for electrodes. It features built-in machining strategies optimized for electrode machining, including the ability to compensate for Spark Gap, and 2D/3D orbiting using ball, bull and flat cutters.
- **The Right Balance of Automation and Manual Control**  
The CimatronE Electrode Solution complements the knowledge and experience of electrode professionals. It offers the right combination of automation and hands-on decision-making power. While time-consuming and repetitive tasks can be quickly accomplished with user-friendly guides and templates, all functionality remains firmly in the experienced hands of the user.

## ELECTRODE DESIGN

The CimatronE Electrode Solution excels at detailed and automated electrode design, offering advanced tools for easy selection of burning surfaces, powerful surface extension and creation functions, and libraries of standard and user-defined blanks and holders. Always keeping your productivity in mind, entire processes, or specific stages of processes, can be saved as templates and easily be applied to other electrodes.

### Burning Area Extraction

The CimatronE Electrode Solution extracts the burning surfaces by simply placing and rotating a blank around the desired burning area. The system automatically selects all the relevant burning surfaces, regardless of their number and complexity, and trims all the other reference surfaces by the selected blank.

To shorten design time and minimize cost, the user can use a library of standard blanks, while minimizing the required blank dimensions by rotating and centering it around the burning area.

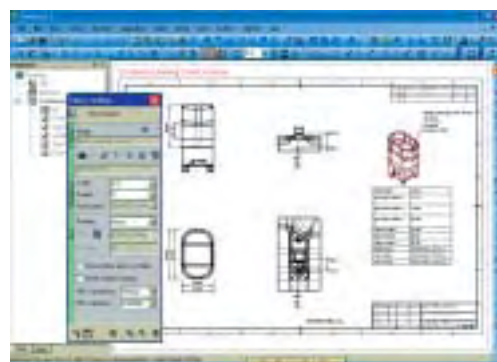
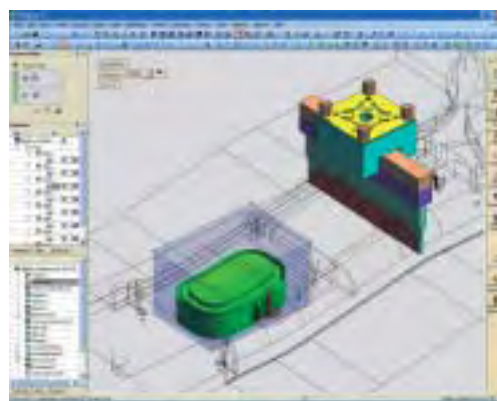
### Detailed Design

The CimatronE Electrode Solution contains flexible surface extension and creation functions, optimized for electrode. Design time is dramatically reduced by automated selection of open edges to be extended or shut, and by applying standard and user-defined process templates that effectively reduce the entire electrode creation process down to a few clicks of the mouse.

Holders may be conveniently selected from the holder library - ensuring the right fit to the blank. The system enables the user to check for possible collisions of the complete electrode with the part or the fixtures.

### Inspection and Burning Drawing

The CimatronE Electrode Solution creates an inspection drawing for each of the electrodes, allowing shop floor staff to verify electrode dimensions prior to burning. The system also creates a setup & burning sheet for each of the electrodes, with corresponding locations and rotations, as well as a drawing of the complete EDM process.



## ELECTRODE MANUFACTURING

Effectively adapting the renowned power of CimatronE NC to electrode machining, the CimatronE Electrode Solution creates a complete user-defined machining process at the click of a button. Supporting a wide range of 2.5 and 3-axis NC operation, the system enables machining of any electrode - from the simple to the very complex. The CimatronE Electrode Solution is also optimized for fine ribs, with built-in features that support machining of very thin elements.

### Machining Efficiency

CimatronE Electrode Solution leverages real-time knowledge of actual stock remaining and adaptive machining strategies, to generate efficient toolpaths. The system features support for high-speed milling, in both rough and finish procedures.

### Consider Burning Parameters

The CimatronE Electrode Solution also features built-in support for the burning parameters, incorporated into electrode machining strategies. The system compensates for the electrode's Spark Gap, rough offset, and 2D or 3D orbiting.

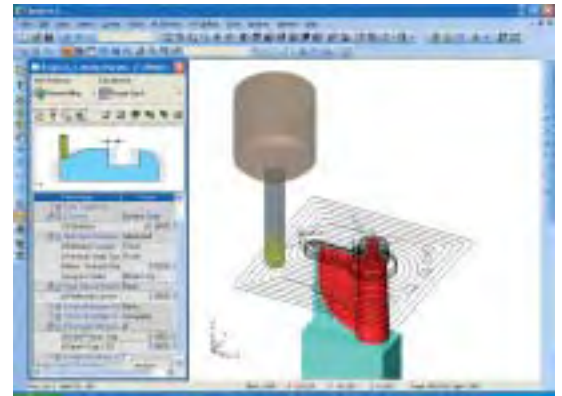
To simplify the electrodes design and manufacturing processes, CimatronE Electrode Solution can generate rough, semi-rough and finish electrodes with different rough offsets, spark gaps and orbiting parameters using the same electrode geometry.

### Process Automation

The CimatronE Electrode Solution includes easily-customized process templates that create efficient milling procedures. Depending on electrode geometry, milling strategies are automatically selected - and the system uses color-coding of functional faces to further automate and simplify NC programming.

## BURNING

EDM Setup replaces the manual EDM process with an NC program, thus automating the burning process, cutting setup times and reducing human errors. EDM Setup allows definition of general and machine-specific burning parameters per location for most prominent machine manufacturers including the Agie Charmilles Group, Mitsubishi, Ingersol and Makino.



## Excellent Value - The Cimatron stand alone Electrode Solution

*All the benefits of the CimatronE Electrode Solution in one cost-effective package*

Specially designed for toolmakers seeking a targeted electrode solution, Cimatron's Standalone Electrode Solution is a unique software package that manages the entire electrode process from design to manufacture - eliminating the overhead and human errors resulting from multiple CAD/CAM software packages.

The Standalone Electrode Solution includes all the necessary tools for defining the EDM burning area, extracting electrode shape, automating documentation, and machining - all

optimized for electrodes. By carefully selecting all necessary CAD/CAM features, Cimatron offers the most cost-effective and complete solution for all electrode design and manufacturing needs.

The Standalone Electrode Solution is available in two configurations: "Electrode Solution", which covers the complete process of electrode design and documentation (drawing), and "Electrode Pro Solution", which adds electrode milling and simulation capabilities.

**For more information about Cimatron Standalone Electrode Solution - please contact your local Cimatron office .**





## What Cimatron customers are saying about the CimatronE Electrode Solution:

"We have come to trust Cimatron's Electrode Solution. It's easy to use and has accelerated our electrode design process by over 80%!"

Wolfram Wienand, Kendrion-Werkzeugtechnik, Lennestadt, Germany

"I can use an automated electrode routine pulled from a catalog and begin cutting within 10 minutes. The software is even intelligent enough to identify uncut regions in NC and help avoid issues in production."

Chris Skinner, TNT EDM, Plymouth, Michigan, USA

"Electrodes and workpieces are loaded fully automatically day and night, and our EDM machines are used 7200 hours per year! We could not manufacture quality electrodes this fast without Cimatron's Electrode Solution!"

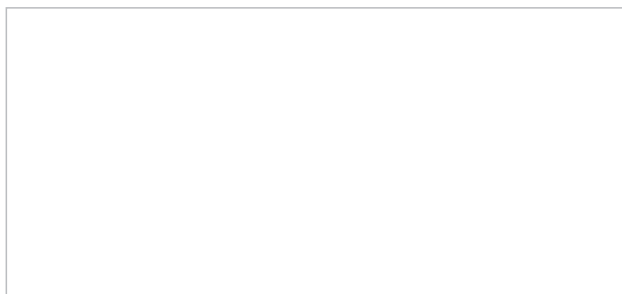
Nico Van Wijnen, Van Wijnen Molds, Gameren, The Netherlands



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

