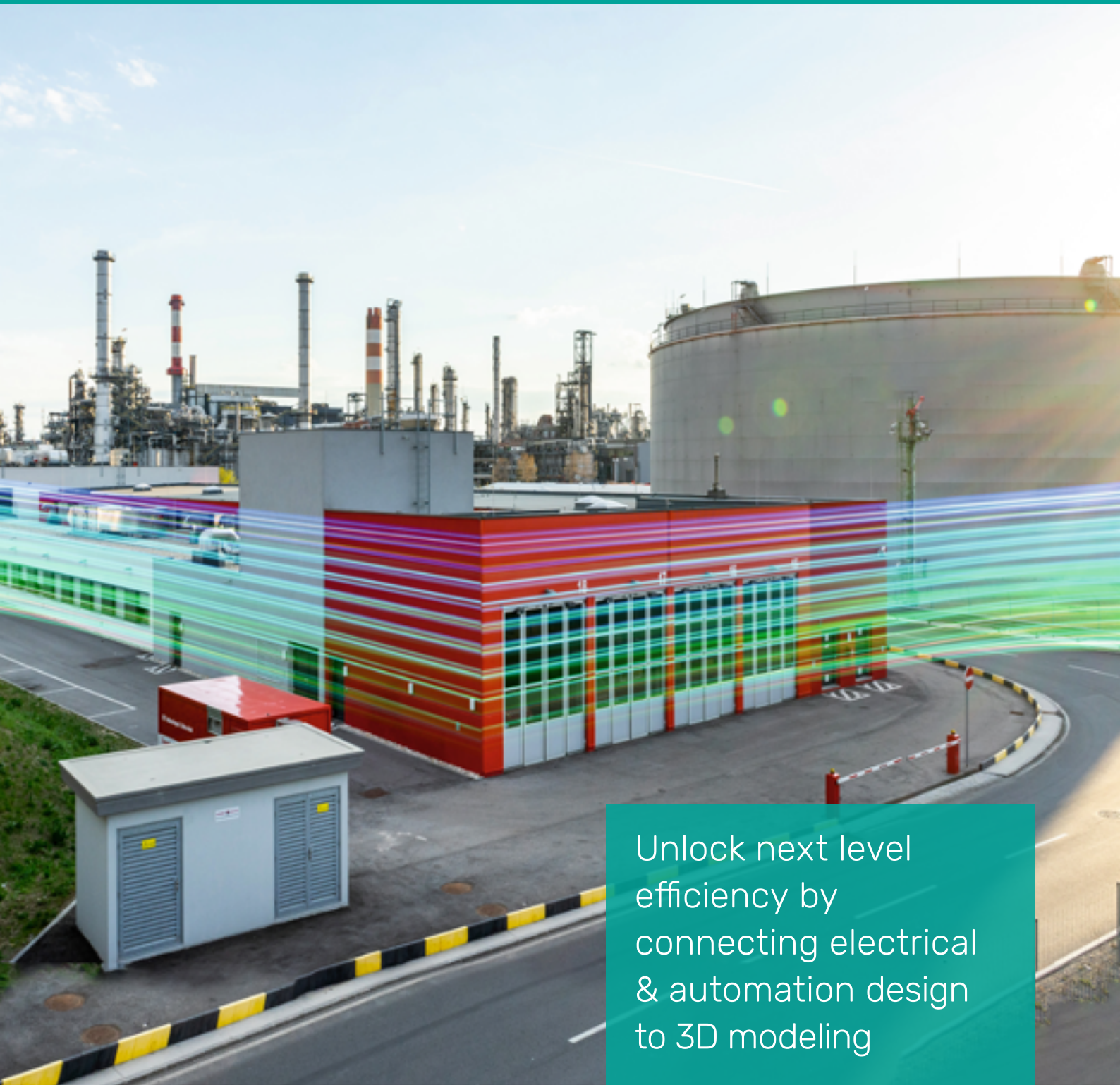




CADMATIC Industry Electrical



Unlock next level efficiency by connecting electrical & automation design to 3D modeling

For Industry, EPCs, design companies, and system integrators

***Feel Empowered***

# CADMATIC Electrical

CADMATIC Electrical allows you to maximize your design output through integrated and high-level features and workflows.

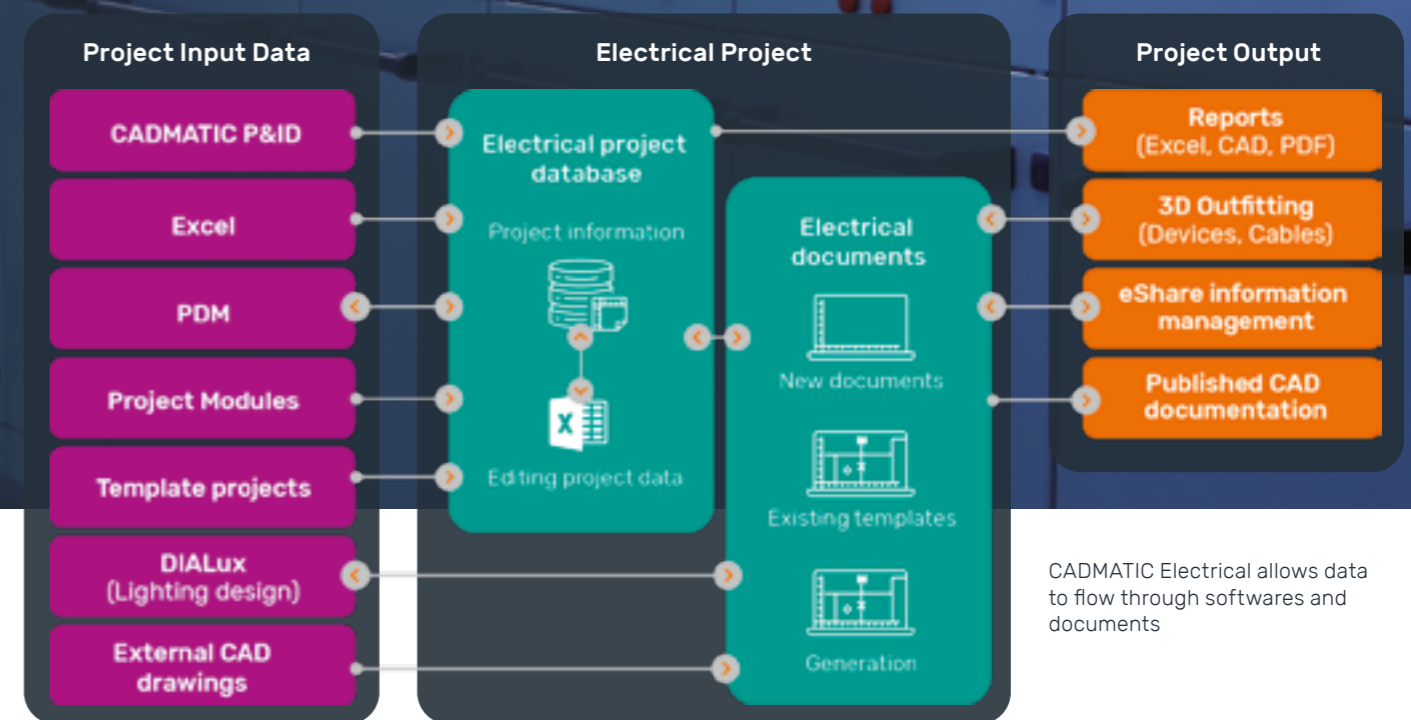
CADMATIC Electrical is the first comprehensive database-based solution for the different design and documentation needs of electrical and automation engineering in the industry: all electrical, instrumentation and automation engineering with one design application.



*CADMATIC Electrical is the safest choice for owners and operators, design companies, and system integrators*

## Key benefits

- Covers complete documentation needs for electrical-, instrumentation- and automation design
- Integrated with other CADMATIC design applications
- Multi-user and database-based features for efficient teamwork and unified design style
- Centralized data management allows data to be created once, but for multiple use; editing data in one place updates it in all occurrences
- Maximizes workflow flexibility on all project sizes
- Generation and reuse options for efficient and time-saving design work
- Data accuracy and quality assurance



CADMATIC Electrical allows data to flow through softwares and documents

## All electrical diagrams and arrangement drawings with one software

CADMATIC Electrical's key deliverables include CAD drawings like single and multi-line diagrams, wiring diagrams, block diagrams, cabinet and panel layout 2D/3D, electrical arrangement drawings, Excel, PDF and CAD reports like cable schedules, device lists, bills of materials etc. With CADMATIC Electrical, you can create the whole scope of documentation that is required for electrical, instrumentation, and automation (EIA) engineering. All drawings, diagrams, and reports can be created with one easy-to-use software platform.

## Choose the work methods that suits you the best

CADMATIC Electrical offers several working methods which allows you to develop your design processes for the utmost efficiency regardless of your customer requirements. Generate your documentation from standardized project modules, reuse your previous projects or design the documentation from scratch. Generation and re-use are the main means to achieve faster project delivery and save time. CADMATIC Electrical will help you to achieve your goals for high project quality and a motivated workforce.

# Comprehensive and integrated design

**Achieve unprecedented efficiency with intelligent object management and smooth integration.**

Create elements once and have them up to date in all documents. Integration with other software solutions reduces manual data handling and allows efficient data use, which makes CADMATIC Electrical a very powerful tool in electrical design in industry.



## **Intelligent object and data management supported with easy navigation**

In CADMATIC Electrical, all elements like devices, cables etc. can have multiple occurrences in different electrical diagrams or arrangement drawings. With centralized data management, it is considered a single element with several occurrences. You only need to create or import the element once. After the object is created, additional occurrences for other documents can easily be inserted or assigned via the project tree, for example.

Elements can have occurrences in diagrams, electrical arrangement drawings, or in cabinet and panel layout drawings. After editing object information via one occurrence, all other occurrences of the same element are updated automatically. With navigation tools, it is easy to find all occurrences regardless of the document type. You can always compare the documents and reports with previous versions to track and highlight the changes and safeguard the quality of your projects.

## **Unlock next-level efficiency by integrating CADMATIC Electrical with your other software solutions**

We have developed CADMATIC Electrical into a designer's workbench, with the aim of integrating software that is important to designers with CADMATIC Electrical. Integrations speed up the transfer and improve the accuracy of information.

In data-driven design, digital data streams are consistent, reliable, and reusable across disciplines, project phases. Data drives and connects the entire process while manual data handling is minimized or eliminated to safeguard data integrity and optimize design.

## **Partnering with Microsoft Excel to raise your design efficiency**

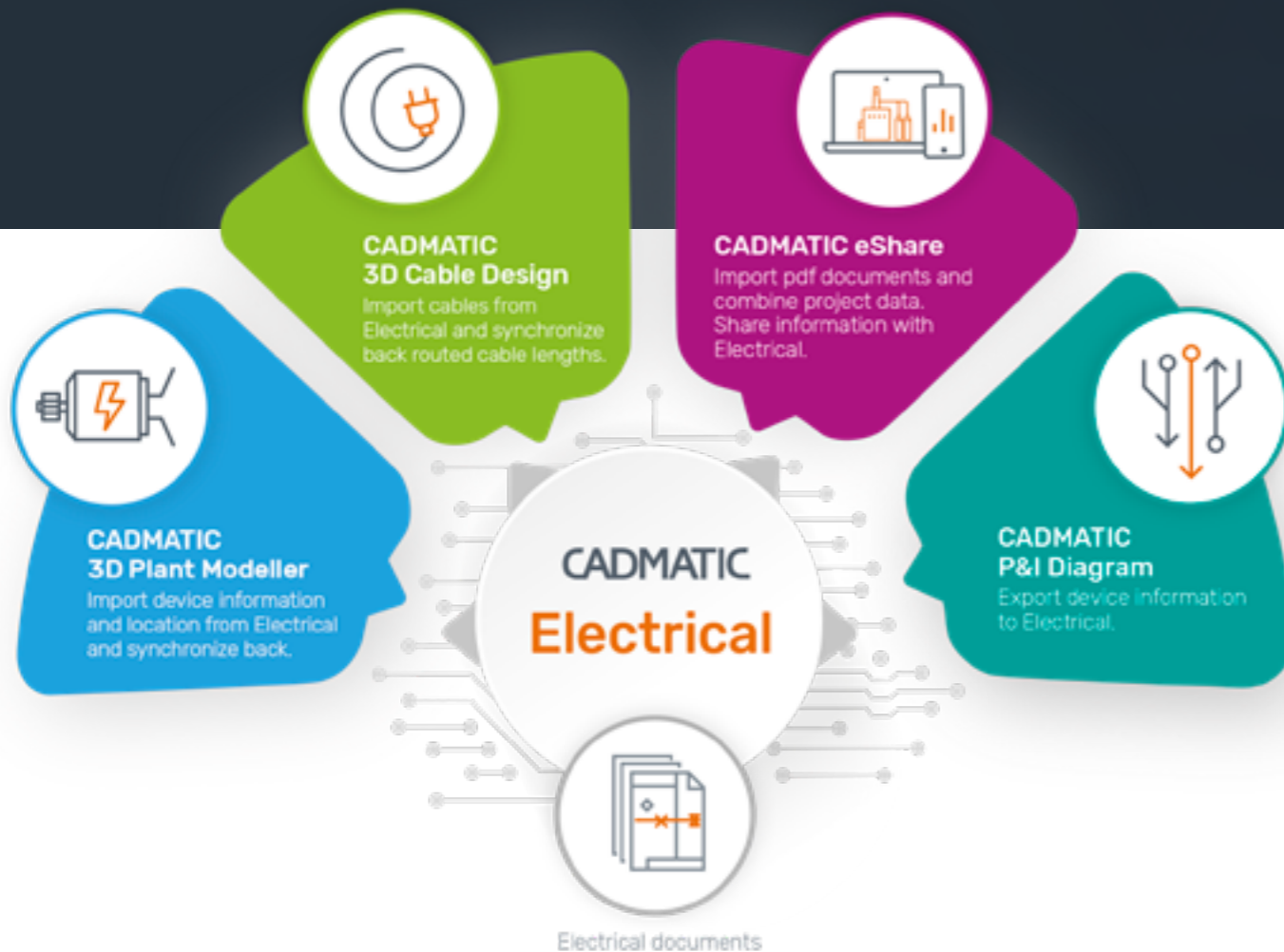
The CADMATIC Electrical integration with Microsoft Excel offers ways to make design work more efficient and data rich. You can easily import and re-import massive amounts of data from Excel files to the Electrical or Automation project database and drawings without the need to retype the information in Electrical.

Excel's powerful editing tools allow user to easily respond to change needs, if required. All Electrical or Automation project data can be visualized in structured and tabular mode in the Electrical Database tool. The user-friendly tabular view of all project information in one window makes quality assurance easily feasible. The same data in its entirety or in filtered mode can be opened and edited in Excel quickly and easily. With its various features like the bulk-editing functionality, Excel brings magic to electrical design.

Project data in Excel and template drawings can also be used to generate new electrical diagrams automatically. Groundwork in preparing templates and modules will lead to a future competitive advantage.

Use CADMATIC Electrical to connect your electrical engineering with other CADMATIC design applications and increase your efficiency to the next level.

CADMATIC Electrical is fully integrated with the CADMATIC plant product family such as 3D Plant Modeller, P&ID and eShare. This ensures data integrity and automatic data flow throughout the entire design process which eventually reduces errors, rework and costs.



*Connect your Electrical engineering with 3D modelling*

#### Multi-disciplinary collaboration with CADMATIC integrated software portfolio

Interdisciplinary collaboration is the key to better productivity and profitability. CADMATIC Electrical is deeply integrated with the CADMATIC product family: 3D Plant Modeller, P&ID diagrams, and eShare.

When using the CADMATIC Electrical module in connection with 3D modelling and eShare, it is possible to link the following:

- Schematics and diagrams
- Electrical arrangement drawings
- 3D objects, such as electrical equipment, switchboards, cabinets etc.
- Manufacturing information for electrical and automation installation
- Supplier's data
- PLM/PDM/ERP data

#### User benefits from integrated design environment

- Drives down costs
- Shortens lead-times
- Reduces quality issues in design, manufacturing and supply chains
- Increases productivity and profitability
- Improves decision-making
- Ensures data integrity
- Reduces rework

# Automated reports and device management

Save time and reduce error-prone manual work with automated reports and device management.

Let the software take care of the basics like generating the reports or keeping the device information up to date. Use your valuable time for something more productive.

## Ensure project quality with automated reports

All reports in CADMATIC Electrical are automatically generated and can be updated with just 2 clicks. Reports can be generated in list mode in Excel or PDF or in graphical form in CAD. There are numerous report templates available in CADMATIC Electrical. In addition, users can easily create structured report templates with their own data fields. The report tool allows various filtering and sorting functions to include the data that matters the most.

Some examples of report types available:

- Device lists (by ID-s or BOM)
- Cable and wiring lists
- Circuit lists
- Terminal strip connection lists
- Document lists etc



## Intelligent device management is crucial for time saving

Device management is crucial when designing complex projects that are filled with sophisticated equipment. The designer needs to take care of quantities and data accuracy throughout the project documentation; there is no room for error as mistakes become costly.

To manage electrical and automation equipment throughout a project, CADMATIC Electrical uses device template technology in the form of Product models. With it, the user can manage all device related data, such as 2D symbols and 3D models, technical or additional data, product data, pin numbers, and plates. It makes it easy for the user to create and maintain their own equipment libraries with detailed information. When a device is added to a project document, the corresponding data is automatically included in Electrical documents, reports, and in the Outfitting 3D model. If the need arises to change the value of a data field or a piece of equipment, all-related occurrences are automatically updated throughout the project, including the graphical symbols. There is no need to edit devices individually!



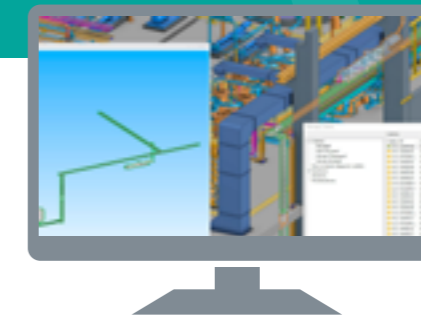
# Plant solutions product family

CADMATIC Plant Design software saves time during design, engineering, and production. The high-quality engineering information enables greater prefabrication and pre-outfitting of blocks, thereby reducing construction times. Besides Cadmatic Electrical there are solutions for structural and plant modelling design as well as information management.



## 3D Plant Modeller

CADMATIC 3D Plant Modeller offers specification-driven 3D design in distributed, multidisciplinary engineering projects where the software tools constantly facilitate, coordinate, and verify the work of individual designers, regardless of where the design teams are located or how big and complex the 3D models are.



## 3D Cable Router

Automatically-generated, optimized, collision-free routes for electrical cables in cableways, based on the nodal network. Users can define alternative cable routes and modify existing routes as required. The cable router supports both automatic and manual cable routing.



## eShare

eShare is the flagship product of the CADMATIC information management product family. It complements design and engineering solutions by providing an innovative and easy way to utilize digital twins and optimize business processes. It allows organizations to combine, find, visualize and share project and asset information in a single and easily accessible web portal.

## Main benefits

- Interdisciplinary cooperation and data accuracy
- One sophisticated software package for all electrical, automation, and instrumentation documentation
- Variety of design processes to achieve better quality and time savings
- Higher job satisfaction and less manual work due to automatization
- Seamless transition between design phases
- Increases productivity and profitability
- Short learning, start-up, and implementation period
- A versatile, reliable, and proven product: a safe choice



## CADMATIC Electrical basic environment

CADMATIC Electrical is standalone database and Windows based 64-bit design application with its own complete Unicode CAD-platform. The database technology relies on Microsoft SQL or -Access. It is compatible with DWG, DXF, DRW (+ DGN import) and IFC formats and allows the import and export of PDFs and raster files. Project data can also be imported or exported to Microsoft Excel. CADMATIC Electrical can be used independently or integrated with other CADMATIC design applications.

## CADMATIC Offers

- Comprehensive integrated software portfolio for electrical and automation design
- Extensive industry expertise and understanding of industry needs
- Implementation, support, and process advice
- Flexible licensing options

CADMATIC is a leading 3D design and information management software developer and supplier for the marine, process, energy and construction industries.

- CADMATIC's headquarters are located in Turku, Finland.
- We have staff in Australia, Canada, China, Estonia, Hungary, India, Italy, the Netherlands, Singapore, South Africa, South Korea, Spain, Sweden and the UAE.
- We have certified resellers and support partners in 15 countries in Europe, Asia, America and Africa. Our growing customer base includes over 6000 customer organizations in 60 countries.



**CADMATIC**  
Linnankatu 52 A  
20100 Turku, Finland  
+358 2 412 4500  
sales@cadmatic.com  
www.cadmatic.com

For CADMATIC worldwide offices see  
[www.cadmatic.com/contactus](http://www.cadmatic.com/contactus)