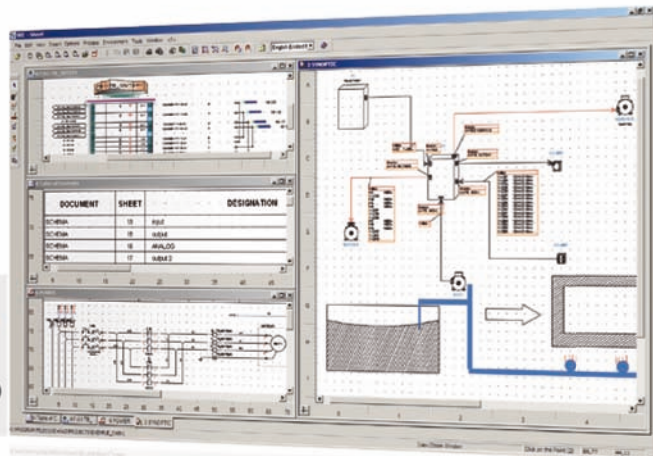




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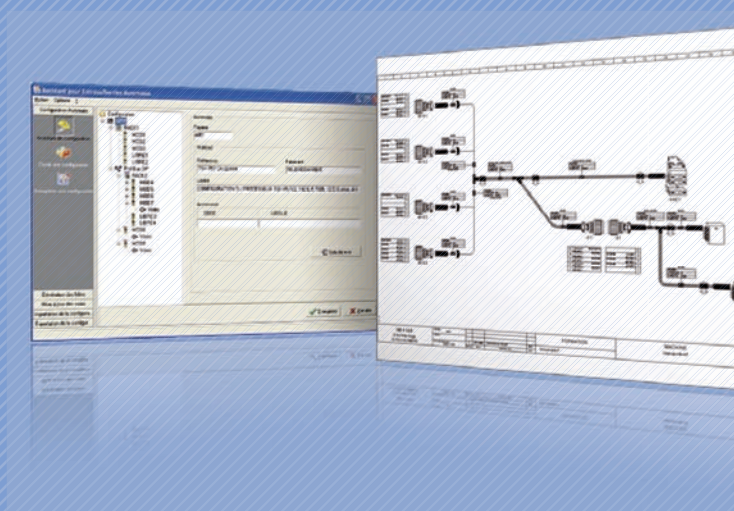
Thanks to IGE+XAO's 24 years of experience, SEE Electrical Expert is a leader in the world of Electrical CAD. The most recent version is a product of listening to our customers' needs and its objective is to optimize productivity while being easier to use.

## Innovation

- The «PANEL MANUFACTURING» module enables optimization of the wiring of electrical cabinets, thanks to advanced wire routing functionalities such as shortest pathway calculation, wireway occupancy rate and drilling plan management. A 3D view is also available.
- The description of a wiring synoptic is enough to automatically generate all the terminal strips and cables, and to re-insert terminals into the schematics.
- The «Harness Documentation» module is an intuitive and easy-to-use tool for designing 2D harnesses and routing the wires and cables in accordance with the schematics.

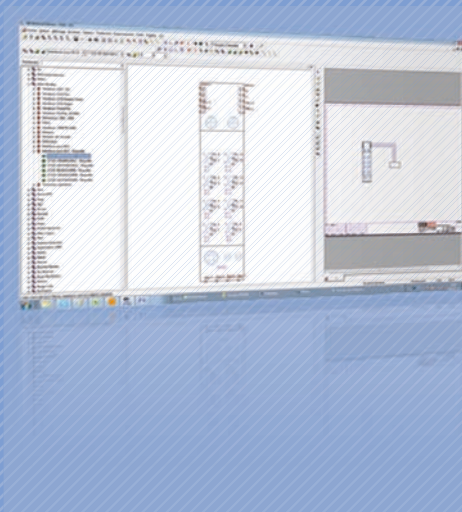
## AutoCAD Compatible

- Import/export DXF/DWG.
- Transfers of diagrams, symbols and blocks.



## An immediately operational business package

- More than 1,000 electrical symbols (IEEE standard, CEI, CNOMO,...)
- More than 900 standard diagrams available (motor starters and corresponding controls, speed controllers, PLC cards,...)
- More than 50 part list templates.
- Dozens of extraction lists available.
- More than 450,000 parts available in the manufacturer databases (ABB, Entrelec, Legrand, MURRelekttronik, Moeller Electric, Omron, Rockwell Allen Bradley, Sarel, Schneider Electric, Siemens, Socomec and Wago...).
- Hundreds of working methods available (symbol tagging, wire numbering formats, terminal strip layouts, connectors, cables, interconnections...).



# The basic SEE ELECTRICAL EXPERT module

## Professional package

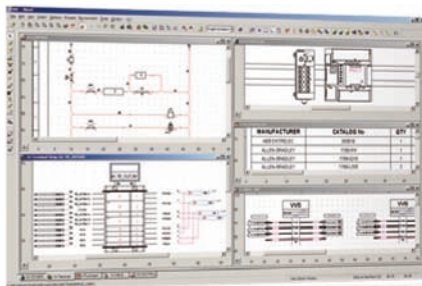
- Creation and modification of electrical schematics
- Symbol manager (creation and modification of smart symbols)
- Project, sheet and diagram template manager through an Explorer
- Index revision management
- Automatic definition of connection points according to the cabling direction
- Slideshow in BMP ; JPG ; TIFF ; PCX ; SVG ; CGM formats. Project can be generated in PDF format
- Manual, semi-automatic or automatic component, connection, equipotential and wire tagging, in a user defined format (several formats supplied, with the possibility to create your own formats)
- Compliant with different standards and working methods (IEC standard...)
- Recalculation of all or just part of the project (standard or numbering method change in the course of the project)
- Real-time management of equipotential networks
- Drawing tools
- Real-time cross-referencing management
- Cross-references updating for the whole project (standard or representation change)
- Component choice according to logical constraints (number of used and available contacts)
- Inconsistency management (short-circuit detection, cross-references check up,...)

## The additional SEE ELECTRICAL EXPERT modules

### External Cabling

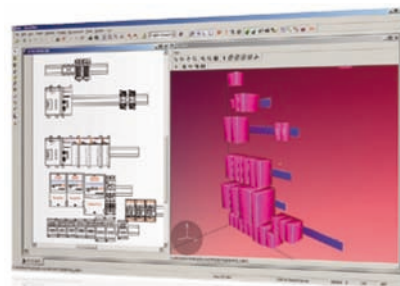
#### Terminals:

- Terminal strip management
- Manual or automatic terminal and terminal strip numbering
- Various terminal types management (pull-out, fuses, diodes, stepped...)
- Cable selection assistance (types, wire numbers, colors,...)
- Navigation between schematic and terminal strip diagrams



#### Synoptic:

- TERMINAL module included
- Synoptic installation design (localization, cable and terminal strip graphical management; navigation)
- Automatic terminal and cable insertion in the schematics
- Automatic cabling
- Multi-connection terminals
- Automatic bridge management
- Connector management
- Inter-enclosure cabling list importation
- Cable lists



### Internal Cabling

#### Cabling:

- Automatic strand symbol creation and insertion on connections
- Graphic cabling list
- Assistance with the cabling of complex installation

#### Harness Documentation:

- Logical and physical (2D) electrical harnesses design
  - Dedicated symbol libraries and component references according to the harness design
  - Positioning of accessories
- Automatic routing of cables and wires into the harness according to the schematics
- Automatic calculation of harness wire and cable lengths and branch diameters

# The additional SEE ELECTRICAL EXPERT modules

## Cabinet Layout

### Panel:

- Equipment placement and collision control
- Associative dimensioning
- Rail and wireway management
- Enclosure selection assistance
- Navigation between panel layout and schematic diagrams
- Consistency check up between panel layout and schematic diagrams
- 3D cabinet view.

## Part List Management

### Part list:

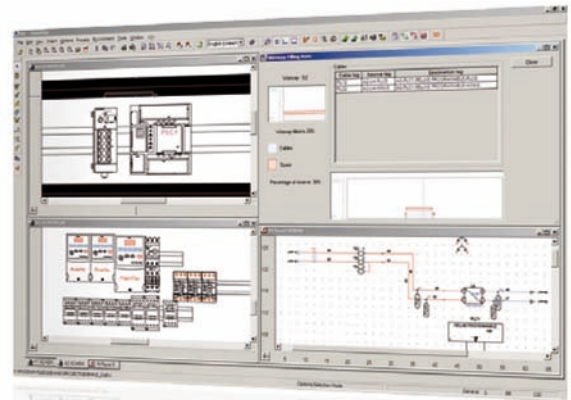
- Automatic part list generation
- Multi-criteria sorting and filtering
- User defined page layout (several available templates, possibility to customize templates, font choice, contents,...)
- Terminal block tags edition for printing machines

### Part list manager:

- PART LIST module included
- Part list management (evolution, revision indices)
- Equipment list importation (pre-part list)
- Equipment catalogue management dedicated to a specific installation (project)
- Automatic equipment code assignment

### Manufacturing Panel:

- PANEL module included
- Wire routing in the cabinet
- User defined wire routing configurations (Compulsory routing points,...)
- Wire length calculation
- Wireway filling rate calculation
- Cabling wire list
- Drilling layout generation



## Exchange And Communication

### Translation:

- Project translation in different languages
- Multi-lingual projects management

### DXF:

- DXF format (AutoCAD) and DWG Importation/Exportation

### SmarTeam Integration:

- SEE Electrical Expert projects and associated documents integration into Enovia SmarTeam PDM
- Project management from SEE Electrical Expert and/or Enovia SmarTeam

### SEE Viewer:

- Documents viewing and printing
- Navigation tools, highlighting, search and marking functionalities

### SEE PM (SEE Project Manager):

- Project Manager
- Electrical data centralisation and securitisation
- Electrical projects operations tracing
- Working environments management and evolution follow-up
- Database formats: ACCESS, Oracle, SQL Server
- User management (user profile definition and readingg and modification access control)
- Project creation according to pre-defined templates
- New solutions creation (re-use notion)
- Project version management, as well as check-out (modification) / check-in (modification update and availability for other users).

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*This documentation was given to you by :*



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