



CAE software – One for All

ecscad / ecscad professional product overview



Contents:

- At a glance
- Mechatronic project design
- Process engineering/electrical measurement and instrumentation technology
- Process engineering and development of intelligent P&ID diagrams
- Building technology
- Maintenance



At a glance:

ecscad – the CAE/mechatronic design system based on AutoCAD

- Available on the market since 1994 as a high-end CAE solution
- Developed as a German product by MuM as a licensed developer
- Installed as an “add-on” if a full version of AutoCAD is present
- Otherwise installed as a “standalone” solution with an integrated AutoCAD core

Fields of application

- Control and automation engineering
- Building services engineering
- Process engineering
- Maintenance
- Electrical measurement, control and instrumentation technology
- Fluid engineering (hydraulics/pneumatics)
- Signal and communications technology

All types of diagram-based project design within a system

- Current flow diagrams, distribution diagrams, block diagrams
- R&I flow charts
- Measurement point loops/typicals
- Hydraulic & pneumatic diagrams
- Audio, video and network diagrams

Genuine CAD functions

- All basic CAD commands for electromechanical designs, including dimensions
- All drawing features and graphical options
- Add existing designs such as views of machines or buildings

Flexible project structure

- Projects structured in accordance with company standards, e.g. according to *plan types, functional systems/location/pages*

Integrated E-CAD interface

- Automatic import of electrical documentation from other E-CAD and CAD systems
- Automatic generation of the original project structure, clear access to all project pages
- Editing of all graphical elements, including symbols, lines, text, etc.

One database for everything

- Logical linking of different types of diagram, e.g. R&I diagram with electrical control circuit

International

- Different menu languages
- Translation management – multi-lingual project design

Different working methods, starting with

- Diagrams
- Parts listed imported from ERP system
- Structural diagram/layout

100% online review

- Genuine network-based multi-user operation – multiple project designers can work on a single *ecscad* project simultaneously
- Monitoring of all information, e.g. duplication of component names or occupied contacts/inputs/outputs

Fast editing and projects

- All text information can be directly edited, e.g. device and apparatus names, via Database Editor
- Export/import data in XLS format for external processing
- Comfortable copying and search functions

Outputs and interfaces

- Generation of technical and commercial lists in various formats, including
 - component and itemised volume lists
 - Measurement point, apparatus, pipeline, cable, PLC lists
- Graphical terminal and plug diagrams
- Intelligent PDFs
 - Complete documentation in a PDF, including data sheets, lists, etc.
 - Navigation to symbols and devices
 - Multi-lingual PDFs
- Interface with Autodesk Inventor
 - Electrical connections for inventor-routed systems
 - Design of 3D structures in Inventor via direct access to *ecscad* projects

Expanded project administration in connection with data management for inter-departmental cooperation

- Autodesk Vault, BlueCielo Meridian, etc.

Open system

- Completely adaptable (sheet headers, lists, symbols/devices, etc.)
- Direct editing of all text information in the documentation
- Documented application programming interface (API) for user-specific adjustments, routines and external interfaces

ERP integration

- Import of any desired product data, e.g. directly from the manufacturer, ERP system, etc.
- Direct transfer of parts lists to ERP systems



AutoCAD / AutoCAD OEM



Autodesk Inventor



Autodesk Vault

