

# INTERGRAPH® SIGGRAPH.CAE®



# FAST-TRACK YOUR ELECTRICAL ENGINEERING WITH INTERGRAPH® SIGRAPH.CAE®

Intergraph SIGRAPH.CAE offers knowledge-based engineering and documentation from concept to detailed design for electrical engineering.

SIGRAPH.CAE, a member of the SmartPlant® Enterprise family, supports the electrical engineer or designer in detailed design tasks. The solution complements SmartPlant Electrical, which is used in basic and conceptual design tasks to lay out the power distribution network. Main loads and interfaces can interface with ETAP to perform design analysis, ensuring safety and reliability.

Intergraph's SIGRAPH.CAE creates all the design and deliverables required for the electrical system. It offers workflow-based design that helps the designer step through various tasks to ensure that all aspects are addressed. SmartPlant Enterprise and SIGRAPH.CAE are proven and ready for production, each having thousands of licenses and hundreds of users around the world.

## Consistency and Productivity

Electrical equipment is often shown on many types of documents, so it is essential to drive consistency through the deliverables. SIGRAPH.CAE maintains all project data in one place. This helps you ensure that reports and drawings provide correct, consistent data, avoiding duplications and reflecting changes throughout the design.

SIGRAPH.CAE also enforces best practices. Many owners have company practices that reduce operational risks and OPEX. In SIGRAPH.CAE, designers can define best practices and reuse them on future projects.

Take advantage of productivity tools such as mass data editing and spreadsheet-type interfaces that enable easy data querying, editing, and sorting.

Many deliverables are available out-of-the-box, such as wiring diagrams, panel layouts, and

control schematics. You can easily customize the deliverables to meet your specific needs.

## Open Flexibility

Project setup is very easy and all data is contained in one place to make it easy to transport it to the site or other offices. The solution interfaces with various vendor data sets, and can import and export to a variety of file formats.

The modular offering and various licensing options (concurrent or moving) makes possible a flexible deployment. You can support the complete workflow from basic to detailed engineering, integrating various disciplines, offices, and vendors.

Both the software and deliverables can be customized for languages from around the world. The discipline-specific interface and multi-user capability increases efficiency and saves time. The graphics interface can create various graphical deliverables, such as single line diagrams and control schematics.

Custom reports promote your work processes, with output formats such as Microsoft® Excel®. A configurable interface supports various formats, such as ASCII, DXF, CSV, and PDF, and can exchange data in many directions, to many other software packages.

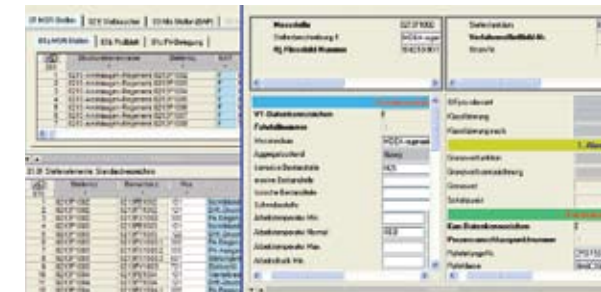
SIGRAPH.CAE offers an API to extend the data model, add automation, and add rules and even functions. Various tools make your data viewable on the Web.

Flexibility is a main requirement for the electrical team. Last-minute changes of loads or additions of electrical consumers create challenges for electrical engineers. At the same time, the team is expected to exceed expectations in the areas of design quality, safety, and reliability. A safe and reliable power distribution and control system is fundamental for any industrial facility. Plus, there are deadlines to meet and budgets to keep.

Intergraph SmartPlant Enterprise Engineering & Schematics solution suite offers a set of task-specific, rule-driven, and data-centric solutions that help you face these challenges and gain a competitive edge in the industry. Fast-track project execution for engineering companies and lower operational risk for plant owners are keys to business success, and Intergraph can help you achieve these goals.



For more information on Intergraph SIGRAPH.CAE, visit [www.intergraph.com/ppm/sigraph.aspx](http://www.intergraph.com/ppm/sigraph.aspx)



## UPDATED DELIVERABLES

The electrical discipline creates many deliverables, making it difficult to keep them all in-sync and updated. Checking deliverables manually is very time-consuming and prone to errors.

SIGRAPH.CAE ensures consistency between deliverables. Take advantage of change management by identifying the changes made during the design cycle. This helps you save time and reduce risk. The solution offers up-to-date documentation so you can reuse your design data, datasheets, and documentation to support various work processes.



## Proven Solution

SIGRAPH.CAE complements the SmartPlant Enterprise solution suite with powerful tools for your electrical and control system. Choose the winning combination that is proven and ready for production.

The knowledge-based system offers integrated basic and detailed engineering that fits your workflows. Take advantage of data-centric documentation based on object-based technology, along with an innovative software architecture.

## Industry Coverage

Gain complete coverage of your workflow and generate required deliverables from concept design to detailed design, procurement, construction, and operation for various process, power, and marine industry segments.

A wide variety of industry leaders choose SIGRAPH.CAE for their workflows. Owner operators include:

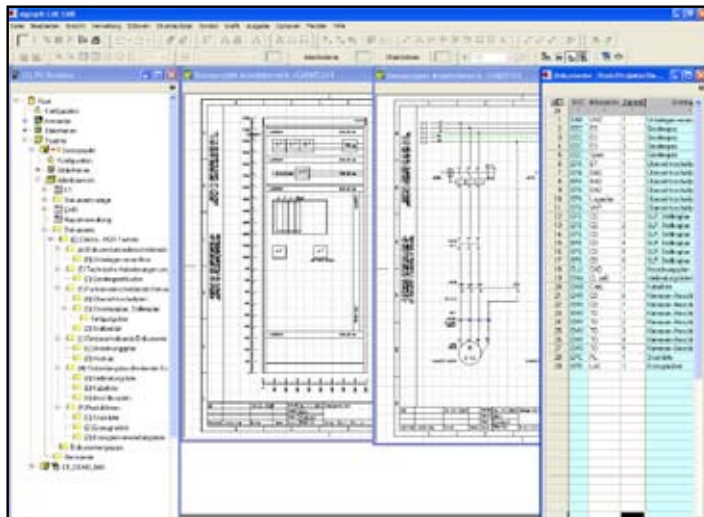
- Energy
- Chemical
- Petrochemical
- Oil and gas

Many discrete manufacturers choose SIGRAPH.CAE, including the following disciplines:

- Metal
- Construction
- Infrastructure
- Shipbuilding

## Enjoy the Benefits

- Ensured data accuracy
- Enforced best practices
- Concurrent project execution
- Change management
- Project budgets met
  - Improve design quality
  - Lower operational risk
- Enhanced facility safety
- Promoted design reliability
- Deliverables either out-of-the-box or customized
- Flexible deployment with modular offering
- Software and deliverables available in many languages
- Discipline-specific interface
- Multi-user capability
- Open interfaces
- Easy project setup



SIGRAPH.CAE promotes efficient panel layout.

## ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides

enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit [www.intergraph.com](http://www.intergraph.com).

