



Intergraph Smart Electrical Conversion

Data Migration and Transformation

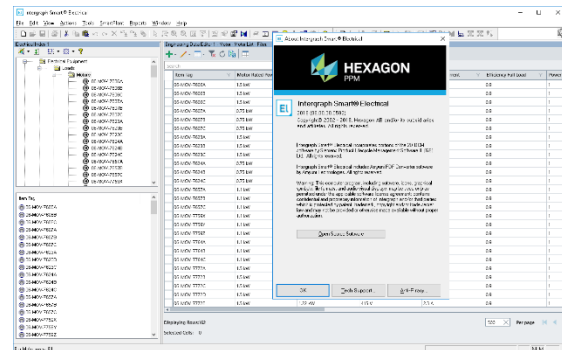
Summary

Intergraph Smart Electrical provides a single source of electrical information that can be easily accessed and updated to maintain consistency across different electrical tasks and deliverables. Owner/operator companies stand to benefit by gaining a single, well-defined source of truth for electrical information.

Unfortunately, Intergraph Smart Electrical has not been broadly or quickly adopted by EPC companies in the industry, and those who do implement it often struggle to adopt the new design methods required to apply it efficiently.

Traditional electrical design deliverables such as single line diagrams (SLD) are drafted directly using CAD tools and are simple to create and modify and cheap to maintain. As the quantity of deliverables rises however, the task of maintaining data on each drawing becomes more time consuming and costly and increases the risk that information may become inconsistent.

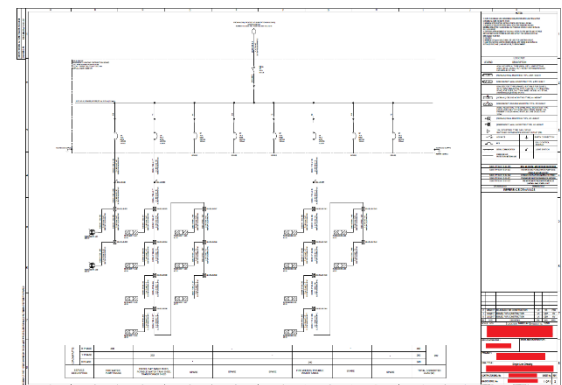
This service bridges the gap by converting or migrating traditional electrical deliverables to Intergraph Smart Electrical. The service converts existing engineering reports such as cable schedules, single line diagrams, equipment datasheets, I/O lists, cable interconnection and load lists to data in Intergraph Smart Electrical which can be used to automatically maintain and reproduce these deliverables.



Intergraph Smart Electrical 2018

Differentiators

- Strong knowledge of and exposure to traditional electrical deliverables
- Extensive experience implementing and working with Intergraph Smart Electrical
- Efficient work process and clear communications minimize impact on operations



Example Single Line Diagram

Challenges

Companies wanting to implement or apply Intergraph Smart Electrical are faced with the following challenges:

- Training is required for designers and engineers
- Increased cost over traditional methods
- Specialists are needed to configure and maintain the system
- Deliverable templates must be configured to suit project or client standards



TecSurge addresses these challenges by providing a conversion service, enabling project design and engineering work to be executed using traditional cost-effective methods, while providing an integrated Intergraph Smart Electrical deliverable to the project owner.

Deliverables

Typical electrical deliverables produced from a conversion project include:

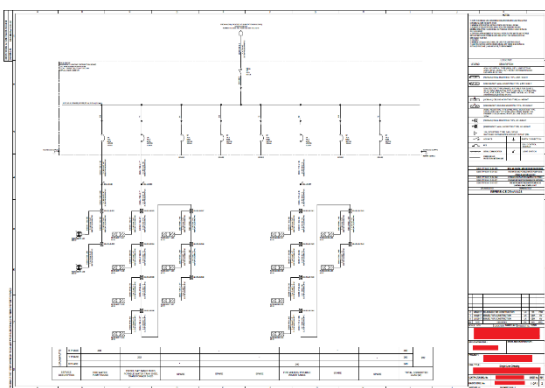
- Load Schedules
- Load Balance
- Switchgear Schedules
- Electrical equipment list
- Cable Schedules
- Schematic Drawings

TecSurge also typically provides:

- User and operating documentation
- Quality and other project reports

The final Intergraph Smart Electrical database is delivered in the form of:

- Site and plant backup files
- Custom report and drawing templates



Example Single Line Diagram 2

Work Process

Our approach to this type of work includes the following stages:

Stage 1: Study the project requirements

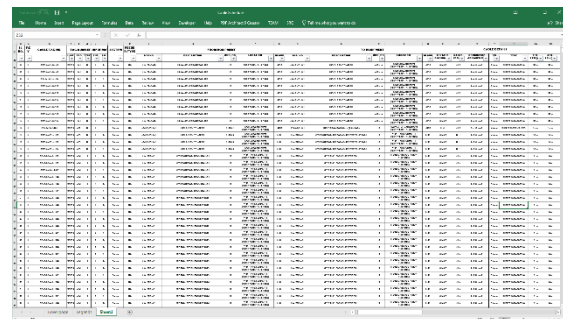
- Evaluate the quantity of reports and drawings for migration
- Review standards or specifications defining software configuration requirements
- Check hardware and software prerequisites

Stage 2: Define the scope of work

- List deliverables for conversion
- Identify the extent of services included
- Identify exclusions and exceptions

Stage 3: Configure the software and database

- Plant Breakdown Structure
- Customise the Plant Options
- Define the Naming Convention
- Customise the Data Dictionary and set the attribute requirements
- Create reference catalogue
- Customise Drawing Templates, Symbols, Datasheets and Reports



Example Cable Schedule

Stage 4: Review and approve customised reports

Stage 5: Convert tags and information from existing reports

- Import tag data
- Perform wiring
- Populate data

Stage 6: Generate reports and drawings and perform quality checks



Stage 7: Submit database, reports and drawings for checking

- Client confirms deliverables are consistent with existing data and requirements
- Client provides approval or comment to close the project

Stage 8: Database handover

GAS COMPRESSOR STATION			
REVISIONS FOR FINAL TENDER SUBMIT			
Rev. No.	Description	Drawn Date	Issue Date
1	Issue for Tender	15/03/2018	15/03/2018
2	Issue for Tender	15/03/2018	15/03/2018
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Example Equipment Datasheets

Quality Assurance

Upon project completion, the warranty period is used to gather feedback on changes or defects identified by the client. After resolution of any reported issues, updated deliverable and data is resubmitted to the client for project closure.

If this service describes your situation, please [contact us](#) today to discuss your options. Let's talk.

Contact us

info@tecsurge.com

