INTERGRAPH SMART® ELECTRICAL

A safe and reliable power distribution system is fundamental. Intergraph Smart® Electrical has helped design many projects of all sizes, from small to mega projects, successfully addressing the demands of design and operations.

USER INTERACTION

Today's users expect a modern look and feel. But more importantly, an interactive solution must be easily understandable by the engineers and designers using the software. This helps users to work as efficiently as possible without the confusion of too many options or complicated, IT type terminology.

The latest version of Smart Electrical harmonizes the user experience across the different SmartPlant Engineering & Schematics solutions.

TASK-BASED APPROACH

It really does not matter which task is performed. In all cases, focus is the key to best results. Connecting these tasks in a smart way will result in better deliverables that will support your facility's engineering, construction, and operations.

Smart Electrical is moving toward a task-based environment just as the other SmartPlant Engineering and Schematics products. This means that the interface focuses on the task at hand, for example:

CREATE THE ONE-LINE DIAGRAM – Generate the loads, panels, and connections in the Electrical Engineer and automatically create the one-line diagram.

PERFORM SYSTEM ANALYSIS – With a bi-directional interface to ETAP, you can seamlessly send data to ETAP for analysis. Retrieve the data with changes and then update the design in Smart Electrical for a consistent and validated design.

BALANCE LOADS – See a quick overview on the loads per bus. You can move loads around to meet project requirements.

MAKE CONNECTIONS – Use the reference data catalog with the cables to drag and drop to make the connections. With changes to the reference cable, automatically update the project cables.

CREATE SCHEMATICS – Take advantage of your best practices and/or project standards to create schematics and interface with Intergaph Smart Instrumentation for any I/O interfaces.

Smart Electrical offers a variety of capabilities depending on the type of project and scope of work. The solution is flexible and fits the project at hand in the most efficient way.

This task-based focus will increase your productivity and data quality. Productivity gains of more than 40 percent have been reported.

Smart Electrical offers many productivity-boosting capabilities, such as batch operations for the creation of electrical items, cable sizing, and more, to take the manual and time-consuming tasks out of the equation.

ENHANCEMENTS

The latest version offers a number of significant changes to boost data quality, productivity, reliability, and safety.

One of the key enhancements is the ability to make complex graphical deliverables to meet project requirements and standards.

DELIVERABLES – Drawings and documents

- Create smart complex graphical drawings of any type and content
- Import external CAD and add smart electrical components and connections

Define an individual revision to an item in a registered report

CABLE MANAGEMENT

- Create and edit parallel cables faster
- Support NEC 2011 regulations in tray fill validations
- Cable route within Smart Electrical and with the Intergraph Smart 3D interface

ELECTRICAL ENGINEERING

- Support electrical loading cases, including multi-case load summary reports, to enable design for all operational cases

INTEGRATION

- Retrieve electrical equipment from Smart 3D

PROJECTS

TITLE	CATEGORY	CLIENT
SmartPlant Electrical & 3D implementation on Habshan Acid Gas Flare Recovery Project (HAGFR)	Engg. & Design	GASCO
SmartPlant Elec & 3D training provided to Electrical staff in 2014	Technical Training	JGC
SmartPlant Elec Basic level training provided to Electrical staff	Technical Training	Wood Mustang
SmartPlant Elec Advance level training to Electrical staff in 2018	Technical Training	JGC