

# SmartPlant® Enterprise for Owner Operators Core Solution



The SmartPlant® Enterprise for Owner Operators Core Solution includes key work processes that are relevant throughout the complete plant life cycle. To help you manage the engineering design basis, this solution provides common core work processes and is a prerequisite for the other SmartPlant Enterprise for Owner Operators (SPO) solutions.

Several SPO Core Solution business packages are currently available.

## ON-PLANT ENGINEERING & DESIGN

Maintaining the dynamic design basis in-line with plant modifications during the plant life cycle is a critical, demanding activity. A bundle of pre-configured, well-proven Intergraph SmartPlant Enterprise applications will be offered on a plant site basis to support maintenance of the engineering design basis and to perform small on-site projects.

These applications include:

- SmartPlant P&ID
- SmartPlant Instrumentation
- SmartPlant Electrical
- SmartPlant Reference Data
- SmartPlant Isometrics (formerly I-Sketch™)
- SmartSketch®

SmartPlant Isometrics provides a simple means of maintaining isometrics. The application provides a digital basis for fabrication purposes and facilitates the update of the 3D model.

In addition, SmartPlant Foundation is included as the common information hub to support data exchange between tools and provides the workflow engine to power the preconfigured work processes. SmartPlant Foundation also serves as a flexible information management repository.

## PLANT BREAKDOWN STRUCTURE & TAG MANAGEMENT

Establishing the plant breakdown structure is a fundamental activity required to manage the design basis of any plant. The consistent and accurate allocations of tag numbers in accordance with the plant engineering numbering system – in addition to the capture and maintenance of design properties in the tag index – are essential activities during all phases of the plant life cycle.

This business package facilitates the bulk loading of the plant breakdown structure (including system, area, fire area, and discipline) from Microsoft® Excel. The business package also supports the centralized allocation of tag numbers in SmartPlant Foundation in accordance with a pre-defined engineering numbering system, maintenance of tag data, and exchange of tag details with design tools.

## ENGINEERING DOCUMENT MANAGEMENT

Effective and consistent management of documents with auditable traceability is essential for operations to demonstrate regulatory compliance and to manage the vast numbers of documents that describe a complex process facility. During development projects, revamp projects, and turnarounds, the allocation of document numbers and workflows to review and distribute necessary documentation to relevant stakeholders are critical processes. This business package addresses the needs of both projects and operations for document management.

This business package will feature a comprehensive set of work processes for document management, including:

- Central allocation of document numbers
- Capture of document metadata
- File archiving

- Distribution and review
- Subscription
- Check-in and check-out
- On-line approval
- Transmittal of documentation internally and externally

To facilitate flexible retrieval, the business package offers full revision history. Documents can be linked to the plant breakdown structure, tags, referenced documents, contracts, disciplines, and more.

Where an Enterprise Content Management (ECM) system such as SAP DMS, Documentum, or MOSS is deployed in an organization, Intergraph's business package is planned in future releases to offer the ability to integrate with these systems. Once the document revision has been created, reviewed, and approved in SPO, the final approved engineering document revision data and files may be transferred to the enterprise document repository. These documents will still be seamlessly available in the SPO browser. Access to administrative documents and e-mails held in ECM systems will also be available and linked to information in SPO.

## PLANT DATA LOADING & QC

Bulk loading of data via predefined Microsoft Excel templates with basic quality control capabilities is available. A separate business package is planned to offer a more comprehensive verification and loading capability as part of the SPO Operating Plant Solution.

## CONCEPTUAL ENGINEERING

The commercial and technical evaluation of alternative plant layouts is an essential part of the conceptual engineering process for both greenfield and brownfield projects.

The Conceptual Engineering business package exploits SmartPlant Layout (based on SmartPlant 3D) for the conceptual layout of plants.

Various plant layout concepts can be quickly generated and compared. The results of any layout can be exported to estimating tools to facilitate cost comparison.

## ENGINEERING DATA BROWSING

The SPO Core Solution provides rapid access to key information within the engineering design basis via multiple search mechanisms and navigation paths. This reduces the time taken to gather necessary information and ensures that all relevant information is made available to facilitate quicker and better decision making.

Additional business packages are envisioned for future releases of the SPO Core Solution.

## VENDOR DATA CAPTURE

The timely acquisition of vendor data from package suppliers is an essential activity to avoid delays in design engineering for both greenfield and brownfield projects. Traditionally, the work required to expedite, receive, register, and distribute vendor data in projects has been considerable. The time-consuming nature of the activity has contributed significantly to project delays. This business package supports the exchange of documents, tag index data, and datasheets from suppliers over extranets and the Internet.

## INSPECTIONS & AUDIT ASSISTANT

Audits and inspections are integral components of plant projects, operations, and maintenance today. Effective definition, auditable execution, and archiving of these inspections are essential to demonstrate project compliance with regulatory requirements and corporate best practices. These actions also ensure ongoing plant operational efficiency, safety, and regulatory compliance. This business package will capture details of audits and findings and provide management reports to facilitate follow-up.

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## ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses, and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships,

and protecting critical infrastructure and millions of people around the world.

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



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