Owner operators face many demands to minimize CAPEX and OPEX expenditures; deliver projects as quickly as possible; ensure safe, sustainable production; demonstrate compliance to meet regulatory authority requirements; and many more. To help meet these demands, Intergraph® offers SmartPlant® Enterprise for Owner Operators (SPO).
SPO leverages the engineering design basis to provide an extensive portfolio of integrated, pre-configured solutions addressing key owner operator work processes across the plant life cycle. These processes leverage the underlying virtual plant asset in Intergraph’s industry-leading SmartPlant Foundation repository and are supported by integrated SmartPlant engineering design tools. SPO offers a comprehensive platform to support critical initiatives such as process safety and asset integrity management. Date-stamping of all information changes and electronic workflows provide auditable traceability to demonstrate compliance for regulatory authorities.

MANAGING THE VIRTUAL PLANT ASSET

**SPO Core** provides the platform and common processes for managing data and documentation throughout the plant life cycle. These include management of the plant breakdown structure; work breakdown structure; central tag allocation and registers; documents and transmittals; tight integration with Microsoft Office; electronic dossiers such as system operating manuals and vendor data books; action and issue tracking; and risk-reducing measures. Engineering business rules ensure accurate and unique allocation of tag and document numbers for projects and modifications.

PROJECT DELIVERY

**SPO Project Execution** manages key processes for successful project delivery. These include management of: interfaces between project stakeholders, project change, non-conformities, and technical queries (also known as Requests for Information). Tight integration between these processes and the underlying engineering design basis enables effective impact analysis within and across these processes. SPO Project Execution is suitable for use with both CAPEX projects and turnaround projects.

The processes offer complete auditable traceability and management overview of these critical processes during project delivery to prevent CAPEX cost overruns and delays in project schedules.

**KEY BENEFITS:**

- Rapid, low-risk implementation of preconfigured solutions supports key O/O work processes
- Integrity of engineering information is maintained throughout the life cycle
- Auditable traceability meets regulatory authority demands for demonstrable compliance
- Data handover and validation from projects are managed in a secure and controlled manner
- Collaboration is supported both within the O/O and with contractors and suppliers
- Ensured consistency of work processes
- Intuitive visualization of information using 2D schematics, 3D models and photo-realistic TrueView laser scans
- Universal Web portal is role-based and user-friendly
- Solution integrates with existing third-party and legacy systems
- Overview reports to support management
- Customer specific requirements incorporated through flexible configuration
- Mobile app support for plant floor and remote workers
- Reuse of plant asset information to support processes across the life-cycle
FROM CONSTRUCTION TO OPERATIONS

SPO Systems Completion takes a project from construction closeout to operations. Systems Completion is arguably the most critical and complex phase of the facility life cycle. Success during this phase is dependent on access to complete, correct, and consistent data. SPO Systems Completion helps maintain the integrity of the virtual plant asset throughout the project to support mechanical completions, commissioning, preservation, and pre-startup safety checks. Allocation of check sheets is automated based on user-defined rules, saving months of manual labor. Check sheets can be completed offline in the field and uploaded into SPO. Graphical 4D reporting on 3D plant models and intelligent P&IDs provides timely and effective oversight of the status of completion processes.

SUPPORTING OPERATIONS AND INSPECTIONS

SPO Operating Plant supports Management of Change in the operating facility. This solution manages proposed changes through the initiation, review, approval, and implementation cycle. Change impact analysis is supported by tight integration with the underlying engineering design basis to identify potential conflicts and synergies between changes. SPO offers interoperability with other enterprise operations systems – such as enterprise asset management (EAM), reliability and asset integrity, process safety, and digital control systems – ensuring that information in those systems is maintained to accurately reflect changes in the dynamic engineering design basis.

SPO Operating Plant also supports equipment inspections. Inspection scheduling, execution, and punch item follow-up are supported. This provides complete records of inspections performed, results, and identification of overdue and upcoming inspections. Inspections are supported by offline check sheet completion on Microsoft® Windows® tablet and laptop PCs.

REQUIREMENTS TRACEABILITY

SPO Requirements Management and Traceability is designed to support owners and contractors in highly regulated industries that need to maintain and demonstrate compliance to changing stakeholder requirements through the plant design, configuration, and operational phases. It provides a dynamic line-of-sight between each requirement and its associated fulfillment in the plant design or documentation.

A document decomposer tool offers a fast and easy way to identify discrete requirements in documents and design specifications. A configurable workflow gives flexibility to determine which users are authorized to identify, approve, link, and aggregate requirements. Approved requirements can then be associated to objects in the plant design basis or documents. A management of change and impact analysis process ensures that requirements and their associated fulfillment items are re-evaluated when there are future changes to either the requirement or the design basis.

PROJECT DATA HANDBOVER & BROWNFIELD DATA TAKE-ON

The handover of data from CAPEX projects and plant turnarounds is a formidable and costly undertaking. It can involve the transfer of thousands of documents and millions of individual data items. SPO provides three complementary solutions that address different
SPO provides us with the ability to mandate a ‘single source of truth.’ It allows us to align the management of change process across the company and improve visibility of change management and change cycle time.


Learn more at www.intergraph.com/go/spo