BENEFITS:

SmartPlant Foundation is an engineering information management solution that:

- Enables seamless collaboration across the value chain and between facility information systems.
- Offers accurate, appropriate data for rapid decision support in time-critical situations and helps to manage inconsistencies and reduce errors.
- Provides a high-integrity and secure repository for project and facility information and documentation with auditable traceability.
- Improves quality of engineering and technical data handover from execution into operations.
- Enables users to find information quickly and easily through many different routes (query, drill-down, navigation, full text retrieval) based on the knowledge they have.
- Promotes client and regulator remote review through a portal to minimize plant startup time and ensure continued operations.
- Provides proven Engineering Content Management (EngCM), including document and drawing management and control, list and sheet development, and exchange with suppliers and contractors.
- Provides unparalleled application integration to increase quality while reducing schedule.
- Reduces cost and errors associated with multiple information sources by eliminating the boundaries between them. SmartPlant Foundation is the single source of access to the engineering truth about a plant – its structure, tags, equipment, data, and documents.

SMARTPLANT® FOUNDATION

Visualizing Key Information from Complex Data Sources

Information is the basis upon which real-time decisions are made. Engineering information is abundant, dynamic, and complex. Keeping this information current, synchronized, and readily accessible throughout the life cycle is the challenge – whether it is used concurrently by multiple companies during plant design, by engineers during plant construction and commissioning, or by maintenance and operations workers on the plant floor.

SmartPlant® Foundation, the Intergraph® total solution for plant information management, ensures secure access to plant information, including engineering designs, vendor data, purchase orders, RFQs, specification sheets, and all ancillary documents to support the plant life cycle. SmartPlant Foundation enables the user to make rapid and accurate design and operational decisions from large and complex data sets. “Business intelligence” provides a collection of key performance indicators, reports, and metrics in a contained user experience without the need to learn a complex data mining mechanism.

Powering the Intergraph information management solutions, SmartPlant Foundation is the world’s most proven and widely deployed, industry-standard, engineering information management solution in the process, power, and marine industries. SmartPlant Foundation provides a modular set of user experiences based on typical work processes to ensure that valid, consistent, and high-quality engineering data is shared between applications and delivered to users when and where they need it.

Information Integrity

The engineering design basis needs to be consistent and highly accurate on three fronts:

1. The physical asset information (what is there).
2. Logical and functional information (what was designed to be there).
3. Regulatory and safety imperatives (what is required to be there).

These are the pivotal tenets of engineering integrity.

SmartPlant Foundation is a complementary offering to Intergraph’s industry-leading design tools, acting as a data exchange hub between Intergraph Smart™ 3D, SmartPlant P&ID, SmartPlant Instrumentation, SmartPlant Electrical, SmartPlant Materials, and PDS®.
The following solutions are powered by SmartPlant Foundation:

- SmartPlant Enterprise for Owner Operators
- SmartPlant Enterprise for EPCs
- SmartPlant Construction
- SmartPlant Enterprise integration hub
- SmartPlant Fusion
- Intergraph Smart™ Data Validator

**Key Capabilities**

SmartPlant Foundation provides:

- **True collaborative engineering** – The solution supports collaborative engineering between companies and supply chains, controlling shared information access and updates, notifying interested parties of changes, and retaining a complete history of all actions taken. SmartPlant Foundation builds a comprehensive repository of information about a plant, including its structure, tags, equipment, and documents, reducing inconsistencies across disparate data sources and increasing plant data integrity. SmartPlant Foundation provides a common viewing and mark-up platform with intelligent navigation between 3D models, schematics, and other documentation.

- **Improved information integrity by providing an overview of changes** – SmartPlant Foundation tracks the details and status of changes to engineering, vendor data, purchasing, maintenance, etc. and highlights plant items subject to change. It enables early visibility of changes, including “what’s in the pipeline,” manages the electronic delivery of work items to pre-defined workflows, and manages the revisions of both plant objects and documents, while keeping an audit history of all activities.

- **Flexible information access** – Engineers can access information through dedicated clients and Web portals via familiar plant terminology using a wide variety of data representations, including reports, work process and change notifications, hyperlinked drawings, 3D models, and scans. Role-based access ensures controlled access to the information that is required. Intuitive access to information eliminates the need for authoring applications at the remote desktop, which reduces cost and training requirements.

- **Streamlined work processes** – The electronic definition of processes enforces mandatory procedures such as required approvals and sign-offs, while remaining flexible for ad-hoc workflows. The solution delivers tasks to authorized personnel, recording the tasks and resulting actions performed.

No other product on the market today supports such a flexible, wide information management scope and yet is deployable in a modular, incremental fashion.