



## 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 lifecycle 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 Hexagon PPM 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 lifecycle. 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 Hexagon PPM 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 Hexagon PPM's industry-leading design tools, acting as a data exchange hub between Intergraph Smart® 3D, Intergraph Smart P&ID, Intergraph Smart Instrumentation, Intergraph Smart Electrical, Intergraph Smart Materials, and PDS®.

The following solutions are powered by SmartPlant Foundation:

- SmartPlant Enterprise for Owner Operators
- SmartPlant Enterprise for EPCs
- 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 zero-footprint web client allowing access to data anywhere, anytime and on any device with just a web browser and no software installation. The web client supports creation, update, viewing, and mark-up. It also supports intelligent navigation between 3D models, schematics, laser scans, and other documentation and intuitive navigation between tags, documents, the plant breakdown structure and all other managed items via a graphical info map.
- **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 and technicians can access information and perform their daily tasks through a simple web client via familiar plant terminology using a wide variety of data representations, including reports, work process and change notifications, hyperlinked drawings, 3D models, and scans. System administration and some advanced user functions are accessed through a desktop client. 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.

## 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

## ABOUT HEXAGON

Hexagon is a global leader in digital solutions that create Autonomous Connected Ecosystems (ACE). Our industry-specific solutions create smart digital realities that improve productivity and quality across manufacturing, infrastructure, safety and mobility applications.

Hexagon’s PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 20,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at [hexagon.com](http://hexagon.com) and follow us @HexagonAB.