



SMARTPLANT[®] ENTERPRISE FOR EPC_s

Hexagon PPM's SmartPlant[®] Enterprise (SPE) for EPCs includes preconfigured work processes that are relevant throughout the complete project lifecycle. SPE provides rapid access to key information within the engineering design basis via multiple search mechanisms and navigation paths.

This provides simple and fast access to all project stakeholders. It facilitates easier project status overview, easier design reviews, and better interdisciplinary collaboration.

The following work processes and capabilities are included in SPE:

PLANT AND WORK BREAKDOWN STRUCTURES

Establishing the plant breakdown structure (area, unit, system, discipline, etc.) is a fundamental activity required to create and maintain the project design basis for any plant. Managing the work breakdown structure by structuring and defining work packages is a critical part of managing activities such as engineering, construction, and procurement for both CAPEX and OPEX projects.

TAG MANAGEMENT

The consistent and accurate allocation of tag numbers in accordance with the project-related or corporate standard engineering numbering system (ENS) is essential for the effective execution of project engineering. Being able to quickly respond to the different ENS requirements of different projects is a critical success factor.

Tag numbers can be centrally allocated in SmartPlant Foundation. SPE enables the consistent control and management of tag items for the SPE from a centralized system. You may choose to create some tag types centrally and keep others decentralized in the engineering tools, according to the optimized work process you wish to deploy.

DOCUMENT MANAGEMENT

SPE ensures the effective and consistent management of documents with auditable traceability. This is essential to manage the vast numbers of documents that are created and revised during the execution of a complex project. You can assemble a data- and document-driven engineering design basis. During engineering project execution, it is critical to properly allocate the document numbers and workflows to review and distribute necessary documentation to relevant stakeholders. SPE supports typical project needs for document management and transmittals. It features a comprehensive set of work processes, including:

- Central allocation of document numbers
- Capture of document metadata
- Document revision and version history management
- File archiving
- Distribution and review
- Subscription
- Check-in and check-out
- Online approval

Documents can be linked to the plant or work breakdown structures, tags, reference documents, contracts, disciplines, and full document history.



To facilitate flexible retrieval, the solution offers many alternate ways of locating documents based on whatever information the user knows, such as document name, relation to elements in the plant hierarchy, related tags, models, or combinations of multiple search criteria. Full Text Retrieval (FTR) on the content of documents is also available. The transmittal features offer preconfigured processes for managing incoming, outgoing, and internal transmittals, including definition of standard distribution matrices to ensure consistent distribution.

EPCs, their suppliers, and plant owners have to create and maintain many complex, compiled documents such as system operating manuals, vendor data books, fabrication record books, and systems completions dossiers. The electronic dossier capability in SPE enables you to manage structured documents in electronic indexes structured by chapters and linked to relevant subsets of plant breakdown structure or plant objects, like tags. Electronic dossiers present documents in a sequence as they would in a physical compiled document, but automatically updates when documents are revised.

MODEL, ASSET, AND MANUFACTURER

Standard manufactured materials can be managed as identified by a manufacturer's model/type reference and individual serialized equipment (assets). This information is necessary for installation, commissioning, and plant handover, and can serve as the basis for effective data and documentation handover to the owner of the plant. This is a competitive advantage for EPCs to provide owners with better capabilities for downstream processes, like facilitating normalization of plant materials and documentation, and supporting modern maintenance build processes.

RISK-REDUCING MEASURES

SPE offers a process for the tracking and management of all risk-reducing measures to mitigate risks identified for a plant during project execution, including the identification of causes, consequences, mitigating measures, and costs.

Engineering contractors can provide added value to owners by being able to provide risk-reducing measures to the owner very early in the project and long before operation starts.

ACTION AND ISSUE TRACKING

EPC project teams must address thousands of actions and issues during each project. SPE can help EPCs manage these tasks more effectively. Actions and issues can be linked to tags, documents, the plant breakdown structure, or work packages and items in other SPE solutions, such as changes and nonconformities, to enable quick and simple impact analysis. Capture and resolution are managed through a simple workflow, ensuring traceability and identification of bottlenecks.

DATA LOADING

Simple, bulk loading of data into SPE via preconfigured, templated Microsoft® Excel® load files is provided by SPE Core. Huge numbers of documents with document header information in predefined Excel lists are loaded and will dramatically reduce the amount of work needed otherwise.

ABOUT HEXAGON

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

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](https://www.hexagon.com) and follow us @HexagonAB.