

SmartPlant® Materials, powered by MARIAN®



TOTAL MATERIALS MANAGEMENT FOR PLANTS AND PROJECTS

SmartPlant® Materials, powered by MARIAN®, is Intergraph's integrated life cycle material and supply chain management solution. It provides a common collaboration platform and project workbench for all partners in any engineering, procurement, and construction (EPC) project supply chain.

SmartPlant Materials helps to lower project costs, compress schedules, improve risk management, and enable companies to act globally in order to maintain advantage in a highly complex, international, and competitive market. From initial cost estimation through the supply chain to on-site management, SmartPlant Materials handles materials standardization, bills of materials and requisitions, procurement functions, fabrication tracking, and site functions, such as warehousing and disposition.

The only complete, commercially available materials management solution, SmartPlant Materials is a real project workbench for all material-related activities. It spans the entire project life cycle, and enables you to focus on corporate project objectives rather than departmental or discipline-specific goals.

SmartPlant Materials uses the latest information technology to provide users with a high degree of flexibility, scalability, and easy integration into existing systems and workflows. Each department or function can simply access whatever materials data is needed for a specific material-related task, in the format most appropriate to that task.

RESPONDING TO BUSINESS DRIVERS

Modular, open, and fully Web-enabled, SmartPlant Materials responds to owner/operator (O/O) and EPC business drivers by:

- Lowering total project and installed costs by reducing labor hours and eliminating materials surpluses and shortages

- Reducing plant schedule through integration with design and cost systems
- Increasing competitiveness through minimized project bidding time, compressed schedules, and reduced man-hours – including administration, engineering, procurement, supply chain management, and construction
- Improving risk management through better overall project performance, project cash flow management, and true management by exception
- Enabling global project worksharing and execution, using correct, complete, and consistent data
- Enabling data re-use throughout the plant life cycle, including plant operations and maintenance, and refurbishment

STANDARDIZATION

SmartPlant Materials offers rule-driven and change-controlled mechanisms that enable the definition and maintenance of standards, including:

- Common industry practices – Such as PIP
- Society standards – Such as API, ACI, ISA, IEEE, NFPA, ASTM, and ASME
- Internal O/O or EPC standards
- Project standards

QUANTIFICATION

SmartPlant Materials supports materials quantification for bulk or itemized materials from estimate and basic (front-end) design, through detailed design, to the as-built plant.

SUPPLIER MANAGEMENT

SmartPlant Materials offers a Supplier Management solution, an integral part of the Material Supply Chain Management module. You can access historical information on supplier performance during previous projects, define and assign criteria for selecting suppliers based on predetermined qualifications and past performance, and maintain supplier history/details/products and vendor history/ratings.

INQUIRY CYCLE AND PURCHASING

SmartPlant Materials provides a central location for the storage of all inquiry and procurement data, and enables effective management of the data throughout the inquiry cycle and all procurement activities. The inquiry cycle time can be greatly reduced by involving the suppliers directly in the process by giving them secure online access via the Internet.

EXPEDITING, INSPECTION & LOGISTICS

SmartPlant Materials enables continual re-use of data from one department to another, and ensures that data is reliably maintained as subsequent revisions are issued. The Expediting, Inspection & Logistics Module can be accessed remotely through the Internet by third parties such as suppliers, freight forwarders, or inspectors.

PROGRESS MEASUREMENT

SmartPlant Materials has the ability to track account codes or control accounts to the material line item level. This enables procurement activities performed at the line item to be captured and reported by control account or account code.

INVENTORY AND WAREHOUSE MANAGEMENT

Data created during SmartPlant Materials Expediting simplifies and shortens the materials receiving process, whether in geographically distributed job sites or warehouses. Over, short, and damage (OSD) reports can be easily created. Reviewing materials issued to subcontractors, based on drawings or work packages, saves you time and money.

CONSTRUCTION PLANNING

SmartPlant Materials enables site management to optimize capacity planning for construction personnel versus predicted material availability at any given point in time. This creates a massive reduction in risk for the contractor, as well as dramatically improved competitiveness.

MODULES THAT FIT YOUR WORKFLOW

The Material Life Cycle Library provides materials libraries at the corporate and project levels, and enables materials revision and change management. The Library also includes piping specification management with exports to 3D design systems (such as PDS® and SmartPlant 3D).

The Engineering & Procurement Integration Module presents the most recent status of any material item being used within the project, allowing the elimination of surplus materials and delays due to materials shortages.

The Material Supply Chain Management Module seamlessly integrates interchanges with commodity suppliers, manufacturers, fabricators, and freight forwarders.

The Site Management Module enables balancing on-site personnel with material availability, assigning material to site inventories in the shortest possible time.

PART OF THE TOTAL PLANT ENTERPRISE SOLUTIONS

Part of Intergraph's overall aim is to provide an integrated life cycle solution for plant design, construction, and operation. SmartPlant Materials creates, captures, and manages materials management data as part of the plant information asset. Based on Oracle, it is a flexible materials management solution that provides an open system architecture, modules for greater scalability, and workflows and menus that mirror the EPC project workflow.

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.

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