



SMARTPLANT® CONSTRUCTION

Dynamic work package planning solution

SmartPlant® Construction is a dynamic work package planning solution that meets the specific needs of construction companies, project management offices, fabricators, and owners in managing construction resources, materials, and schedules. The intuitive, configurable interfaces enable work package planners to create effective work packages using industry-proven work processes.

Real-time material integration availability reports provide dynamic re-planning capabilities, and a configurable planning window enables planners to make economical modifications before problems grow. Intergraph® created SmartPlant Construction specifically for construction planners to more efficiently plan and manage fabrication and construction projects, resulting in enhanced safety, increased quality, and improved productivity.

Using current information from various sources such as 3D models, 2D engineering tools, materials management, and project control and scheduling systems, SmartPlant Construction ensures accurate and timely decisions can be made on the best available information. Users can create 3D model and drawing filters with enhanced 4D animation, powerful new pre-configured filters, and selection rules for a 3D model. This delivers significant efficiency and improvements in building a work package, along with cost and time savings.

BENEFITS

- Reduce risk.
- Improve transparency of construction
- Save time.
- Increase efficiency.
- Eliminate errors.
- Improve decision-making capabilities.
- Improve productivity.
- Lower costs.

SCHEDULING

SmartPlant Construction offers a direct link with Primavera and imports a Level 3 schedule for work page planning. A scheduler feature also enables users to select durations, crew size, work week schedules, non-working day, and set dependencies. Users can view, sequence, calculate, and animate schedules. They can now even export detailed schedules back into Primavera.

Users can animate work packages in the 3D model that links to the scheduler, then record and save schedules.

COMPONENT REGISTER

The component register will display all data file folders that have been published and retrieved into the register. Users can generate spreadsheets and use the new component register to publish and retrieve these schedules into SmartPlant Construction. Users can now drag and drop electrical cables from the register and create work packages. The preconfigured rules of progress will attach the components, work steps, and man-hours to the work package and automatically generate planned man-hours.

IMPROVE CAPEX EFFICIENCY

A major construction project involves thousands of workers, millions of details, and numerous complex variables, such as labor, materials, weather, and schedules. How can you manage millions of bits of data every day to complete the project on-time and in-budget? How can you turn improved information management into increased field productivity?

The challenge for the construction industry is determining how to make informed decisions based on the most accurate information available and how to manage people and materials in a dynamic construction environment to advance the project in the safest and most efficient manner.

CONSTRUCTION PROGRESS MEASUREMENT

One of the most critical tasks in field construction is the ability to accurately measure and report actual construction status throughout a project. SmartPlant Construction provides a platform to precisely record field construction status based on configured rules of credit and report on this status. By using the 3D model, you can easily view progress in all stages of construction. This improves reporting accuracy and speed, giving an accurate picture of construction status.

WHY SMARTPLANT CONSTRUCTION?

SmartPlant Construction is easy to use and administer. It has a “real-time” link to drawings, schedule, procurement, and engineering. This improves planning, readiness, and effectiveness.

INTEGRATE WITH YOUR ENGINEERING ENTERPRISE

SmartPlant Construction promotes better planning and management by incorporating the dynamic inputs from engineering, scheduling, procurement, fabrication, and materials management into a solution specifically developed for construction by industry-leading construction companies.

To enhance flexibility and interoperability, SmartPlant Construction offers full integration with the industry-leading SmartPlant Enterprise suite of products. Take advantage of data interfaces and true integration. The open API solution builds on the proven SmartPlant Enterprise portfolio by offering a wide variety of functionality provided by SmartPlant Enterprise solutions.

ENTERPRISE SOLUTION

SmartPlant Construction benefits the entire engineering, procurement, construction, and operations value chain:

- **Owner operators** can improve CAPEX efficiency by consistently managing engineering information from concept planning, detailed engineering, procurement, and construction into operations and maintenance.
- **Fabricators** can provide direct input to facilitate real-world construction plans.
- **Constructors** can reduce project cost with improved visibility on project plans, accelerate their ability to re-plan dynamically in response to real-world changes, and take advantage of enhanced integration with engineering, procurement, and fabrication to optimize both engineering and construction decisions.
- **Engineering firms** can improve decision-making based on “real-time” construction status, and vice versa.

BUILDING ON PROVEN TECHNOLOGY

Intergraph has the industry experience, technology, and integration expertise to address the specific needs of construction managers and facilitate smooth work processes with engineering and operations.

“ We will see a step-change in both construction work packaging and progressing efficiency using SmartPlant Construction. ”

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ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph’s industry-specific software to organize vast amounts of data to make processes and infrastructure better, safer and smarter. The company’s software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, operation and data management of plants, ships and offshore

facilities. Intergraph SG&I provides geospatially powered solutions, including ERDAS technologies, to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is a wholly owned subsidiary of Intergraph Corporation responsible for the SG&I U.S. federal business.

Intergraph is part of Hexagon (Nordic exchange: HEXA B; www.hexagon.com), a leading global provider of design, measurement, and visualization technologies that enable customers to design, measure and position objects, and process and present data.

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