INTERGRAPH®

SMARTPLANT® REVIEW

POWERFUL AND VERSATILE 3D VISUALIZATION

Intergraph® SmartPlant® Review is your problem-solving 3D visualization tool. It is a member of Intergraph's SmartPlant family of life-cycle engineering solutions for the process, power, and marine industries. SmartPlant Review is ideal for the visualization and engineering animation specialist who uses the software daily or the occasional user who needs to review designs and use the 3D model as a graphical interface to access project data linked to the model.

VISUALIZE ACROSS YOUR WORKFLOW

SmartPlant Review is at home in the design center, on the road, in the plant office, and on the plant floor. SmartPlant Review provides value throughout the entire plant life cycle, including HAZOPS (hazardous operations) reviews, accessibility studies, and downstream projects, including retrofits and upgrades. Load projects of any size. Use SmartPlant Review's unique object streaming technology to display any number of intelligent objects, with as much or as little detail as you want. See what you want, how you want.

EXTEND YOUR FUNCTIONALITY

For additional functionality, SmartPlant Review offers eight optional modules for PDS® clash management, construction and schedule review, on-site drawing generation, enterprisewide collaborative review, laser point cloud display, simulation and visual effects, photo-realism, and custom programs.

Collaboration Module

The SmartPlant Review Collaboration module allows multiple users in different locations to view and interrogate the model at the same time. The Collaboration module also allows enterprisewide coordination of design reviews for more effective

communication and improved efficiency, while reducing travel time and expenses. This module is built on top of Microsoft® NetMeeting, which ensures security and enhances connectivity for your project team.

Simulation and Visual Effects Module

The SmartPlant Review Simulation and Visual Effects module brings life to your 3D model. It simulates the placement or removal of equipment to review physical clearances, as well as performs motion studies and develops complex motion scenarios. Used in conjunction with the SmartPlant Review Construction module, you can visually simulate the construction process, review the simulation on-screen, or create animations for output to video.

Photo-Realism Module

The SmartPlant Review Photo-Realism module will take your still images to a new level of quality. Raytracing a 3D model creates depth and realism. You control lighting and display attributes for a realistic image with textures, patterns, shadows, and reflections, improving communication to clients and managers. Visualize designs during each stage of the development process and create powerful presentations that communicate and sell your ideas.

On-Site Drawing Generation Module

The On-Site Drawing Generation module allows you to bring design and drawing capabilities from the office to your project site. This module features fast, intelligent hidden line display capability – your drawing maintains intelligence even when displayed in hidden line mode. The module also improves communication because you control the way the drawing will appear to others. Additionally, by reducing the time required to process and display hidden line removal from hours to a fraction of a second, the On-Site Drawing Generation module saves time and money.

Point Cloud Integrator Module

The Point Cloud Integrator module offers vendor-neutral point cloud data integration with the plant modeling software environment. An interface is provided to products like those offered by FARO, Leica Geosystems HDS, Quantapoint, Trimble, and Z+F, allowing you to manage existing-condition data by enabling the display of laser scanning data within SmartPlant Review. This helps lower the time, effort, and cost of process plant retrofit engineering and construction projects. It extends the use of 3D CAD to more projects. Point cloud integration also helps in the planning of existing plant remodeling by coupling existing plant configuration provided by point cloud scans with 3D model displays.

Construction Module

The SmartPlant Review Construction module provides integrated project scheduling and collision detection functionality. As a construction sequencing tool, SmartPlant Review includes ScheduleReview, which turns data from your project planning software, such as Primavera Project Planner and Microsoft Project, into a visual display of the construction or demolition progress. Plan safe and appropriately timed equipment installation with the collision detection function as you move equipment through the plant with sound effects and highlights.

API Module

The SmartPlant Review API module includes programming libraries that enable developers to create programs that run on SmartPlant Review. The API module is not required to run the custom applications, merely to create them. The API module also provides the ability to create a VUE file interactively while inside SmartPlant Review.

ACCESSIBLE

Think about where you need 3D visualization and data access, especially in construction. With SmartPlant Review, you are no longer limited in your access to the design by the constraints of your computer network. SmartPlant Review enables you to display the entire plant model and associated data at any remote location, totally independent of the office network. You can display the true plant coordinates at any time, execute searches automatically, and perform accurate, repeatable measurements that can be labeled in the view. SmartPlant Review gives you this kind of access to data, as well as the independence to do your job.

USABLE

SmartPlant Review is a modular, scalable, flexible visualization environment. SmartPlant Review offers you the opportunity to customize the product to meet your individual needs. With Microsoft Windows®-compatible, familiar, and intuitive menus and navigation tools, no formal training is required.

SCALABLE

SmartPlant Review provides a core product loaded with functionality that can then be supplemented with additional modules for the specific functionality required. Buy what you need – no more, no less. SmartPlant Review is hardware-scalable, too. Once you've chosen your software configuration, you can run it on standard desktop PCs, on ruggedized notebook computers on the construction site, or on high-end multimedia workstations with multiple processors.

SMARTPLANT REVIEW PUBLISHER

SmartPlant Review Publisher supports the conversion of common plant formats for viewing in SmartPlant Review. This separately available product adds versatility to SmartPlant Review by enabling you to compress and distribute project files to a network server or a user's machine for viewing. Because SmartPlant Review Publisher is server-based, you only need one copy to schedule the conversion and distribution of your projects.

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 into understandable visual representations and actionable intelligence. Intergraph'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, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries.

For more information, visit www.intergraph.com.

INTERGRAPH®