



## WHAT'S NEW IN SMARTPLANT® 3D

### INCREASE PRODUCTIVITY, ACCELERATE PROJECTS, AND GAIN A COMPETITIVE EDGE

The latest release of SmartPlant® 3D continues the product's position as the first and only next-generation 3D plant design solution for the process and power industries. Smart 3D technology delivers approximately 30 percent more productivity than any other system available today. More than 200 customers worldwide use Intergraph® Smart 3D technology in production. Take advantage of the key components of the Smart 3D technology architecture:

- **Rules** – Capture engineering knowledge and push it into design with an extensive and customizable rule set
- **Relationships** – Capture and maintain design intent
- **Automation** – Drive actions through the system with minimal user input, which removes the mundane and enables a focus on value-added operations

SmartPlant 3D's latest release offers several key productivity and performance enhancements that leverage its data-centricity and architecture. SmartPlant 3D is part of the SmartPlant Enterprise, giving you a complete solution for your entire life cycle.

### NEW FEATURES

#### Model Data Reuse

A new Model Data Reuse Wizard enables you to copy systems and the objects nested under those systems to a new destination within the same site database. This is a significant market differentiator that allows the systematic reuse of 3D model data. Reusing data offers a number of benefits, including:

- Significant savings on design time and costs
- Ability to respond more quickly and accurately to requests for proposals (RFPs)
- Knowledge retention

- Less rework during design and in the field
- More accurate material take-offs, as well as cost savings associated with long-term visibility on material requirements
- Tagging accuracy
- Freeing designers for more value-added activities

#### Reference 3D

New Reference 3D functionality enables you to attach externally generated 3D data to your live model. The proven SmartPlant Review technology supports a variety of formats, including Smart 3D, PDS®, PDMS, SAT, DGN, DGN V8, DWG, and VUE. This feature is especially useful for joint venture projects, disconnected workshare, sensitive project data, and intellectual property cases.

Reference 3D offers powerful drawings and reports capabilities to accelerate project schedules. Regardless of its source, reference 3D data is intelligent data because SmartPlant 3D recognizes the attribution data properties.

You can apply style rules that affect all of the data, even those from a different software source. You can standardize the design of modules – reference one module, and then any changes made to module 1 will be made automatically to module 2. Replicate similar units with parallel design. As information is added to the main unit, it is easily propagated to the child units, increasing efficiency and design quality.

#### Faster 3D Display Performance

Designers can perform 3D navigation (pan, rotate, zoom in/out, fit, view update, etc.) on even the largest models with response times previously expected only from 3D games and simulations. The 3D display performance is now as much as 10 times faster.

## Improved Usability for 3D View Manipulation and Navigation

SmartPlant 3D provides on-screen view controls (fade-in/fade-out), gaming-style dynamic fly mode, and gaming-style mouse and keyboard controls. The new 3D navigation controls, included in all of Intergraph's 3D tools, are simple, easy to use, and intuitive, requiring no training to perform 3D model navigation. These controls put every new or experienced designer in the driver's seat.

## Laser Scanning Integration

In addition to SAT files from equipment manufacturers, PDS models, and PDMS models, you can now reference laser scan point clouds from vendors including Leica, Z&F, Trimble, Quantapoint, and CSA. The latest release enables direct access of as-built laser survey points for display, measurement, and modeling, providing clash-free, in-context design capabilities.

Laser data for in-context design offers three key improvements: you can integrate visual reference for engineering, eliminate manual measurement, and continuously validate against accurate data.

## Extended SmartPlant 3D Modeling Capabilities

The latest release offers extended modeling capabilities, two of which are of particular interest – fireproofing and solids modeling. SmartPlant 3D now offers the most advanced, sophisticated fireproofing capabilities available in any plant design solution. As for solids modeling, SmartPlant 3D will support sophisticated modeling of concrete structures. This is particularly helpful in industries with many unique geometries, such as nuclear or offshore, but will also solve more common problems as well.

## Expanded Content

A large amount of content has been added to the latest release, including symbols for flanges, valves, valve operators, fittings and specialty items, instruments, jacketed pipe, cable trays, duct bank, lighting, conduit, HVAC, and many more. SmartPlant 3D has extended sample catalog data in a variety of ways, such as:

- Enhancements to various delivered specialty symbols (silencer, flame arrestors, etc.) to provide more precise dimensioning
- Addition of various drawing labels
- Delivery of various production reports
- Addition of concrete and fireproofing materials and more than 20 steel and concrete section tables
- Production-ready hazardous fluid service rule
- Improvements to delivered conduit specifications and part data
- Equipment symbols for wastewater collection and treatment and drain-waste vents

## Citrix Support

The latest release of SmartPlant 3D is fully supported and tested on Citrix Presentation Server 4.5 (XenApp 4.5). This new capability delivers value for companies using Citrix for virtual deployment and cost management.

## 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.

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