PRODUCT SHEET

INTERGRAPH®

COMPARE THE FEATURES!

- Verify P&IDs against isometrics or 3D models (or vice versa)
- Configure easily and according to your own standards and comparison basis
- Employ a descriptive, intuitive graphical user interface
- Analyze software-highlighted inconsistencies in your piping system drawings
- Decrease or negate the need for re-creating isometrics
- Keep all drawings current, even where change is continuous
- Read piping data from virtually any plant design system, bringing it to as-built condition
- Check and update P&ID data to create a real-time engineering basis for decision-making
- Fit a verification solution seamlessly into your workflow

SMARTPLANT® P&ID DESIGN VALIDATION

Check SmartPlant® P&ID Data Against Isometrics and 3D Models

Choose Intergraph® SmartPlant P&ID Design Validation to check SmartPlant Isometrics, ISOGEN-generated isometrics, or PDMS 3D models against your SmartPlant P&ID logical design. SmartPlant P&ID Design Validation provides an iterative workflow for verifying your piping system drawings at the data attribute and topology levels. Take advantage of this new product to create and maintain a consistent and standardized engineering data set for your entire plant life cycle.

VALUE PROPOSITION

SmartPlant P&ID Design Validation can increase productivity by ensuring current and accurate data, helping you make the right design decisions at the right time. With faster, easier comparison of piping system drawings, Design Validation provides a vital tool in resolving design flaws and preventing downstream errors, giving you data consistency in all your P&IDs, isometrics, and 3D models. Rule-driven, intelligent graphical comparison of all drawings across the verification workflow reduces the number of design checks that must be made, thereby increasing reliability and minimizing engineering labor. In addition, a synchronized engineering data set for all drawings means less risk is involved in the maintenance and modification of the piping system.

CONCURRENT WORKFLOW

The solution's concurrent workflow begins with configuration, which is performed only once per project. Because Design Validation accepts data from disparate systems, the data is converted to a neutral format before comparison (based on your design practices). Configuration allows you to define:

- Data mapping
- Design correlation criteria
- Design comparison criteria

Next, according to the focus of the design check, data is imported from SmartPlant P&ID (PIDs) and either SmartPlant Isometrics (PCFs or PODs), ISOGEN®-generated isometrics/drawings (PCFs or IDFs), or PDMS models (DATAL). Then you begin the comparison phase. SmartPlant P&ID Design Validation auto-correlates the data, and verifies attributes and design content/topology. It also highlights any inconsistencies that need to be resolved. To support the work process, you can quickly document the mismatched items and make notes to the responsible department. You can then send a detailed report to the team members in the discipline(s) owning the data.

SMARTPLANT ENTERPRISE

Intergraph's SmartPlant Enterprise includes functionality similar to that of SmartPlant P&ID Design Validation. With SmartPlant Enterprise, in addition to comparison and validation tools, you can perform design with the P&ID inside the 3D model, which provides additional benefits.

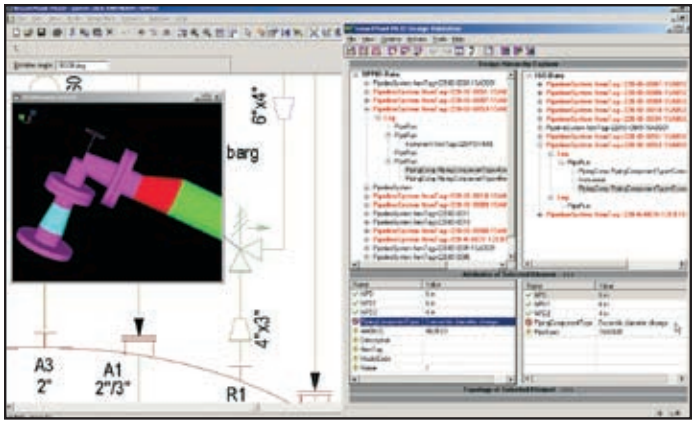

Figure 1: SmartPlant P&ID Design Validation allows navigation of the logical (2D) P&ID and provides graphical detailed views of the (3D) model data to examine the design content of related plant items.

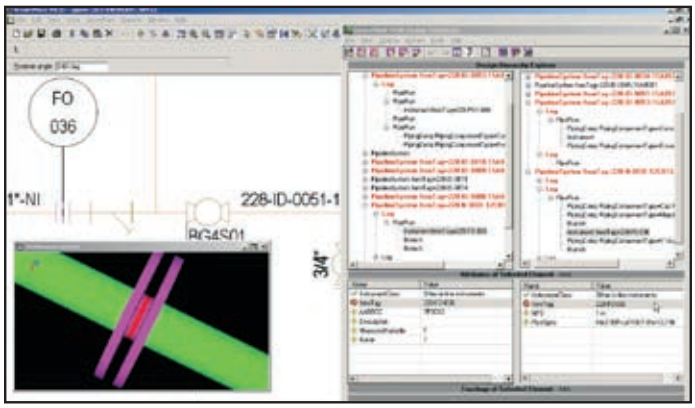

Figure 2: SmartPlant P&ID Design Validation shows any attribute inconsistencies between related plant items.

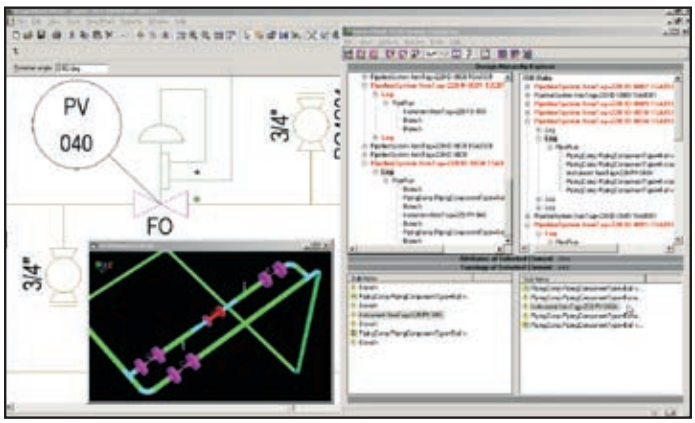

Figure 3: SmartPlant P&ID Design Validation allows navigation of the logical (2D) P&ID and provides graphical detailed views of the (3D) model data to examine the topology of related plant items.

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..

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