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 product to create and maintain a consistent and standardized engineering data set for your entire plant life cycle.

WHAT’S NEW
The latest version includes several enhancements aimed at boosting productivity, such as:

• A new graphical user interface (GUI) offers a much richer experience.
• Pipe run attributes are listed to merge the pipe runs into pipelines.
• The full content of the settings initialization file is applied on import.
• Pipelines and equipment can be sorted in the Design Explorer Tree view.
• P&ID and ISO viewers can be part of the main window.
• Active settings can be easily applied.
• Support nozzles can be correlated and linked nozzles can be automatically selected.
• The solution is compatible with the Microsoft® .NET Framework.

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.

ABOUT INTERGRAPH

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