



SMARTPLANT® INSTRUMENTATION DIMENSIONAL DATA FOR PIPING (DDP) MODULE

Intergraph® SmartPlant® Instrumentation Dimensional Data for Piping (DDP) module significantly enhances the work process by integrating with SmartPlant Instrumentation, PDS®, and SmartPlant 3D. Piping designers can place the automatically created 3D representations of in-line instruments in PDS Piping or SmartPlant 3D, driven by the data in SmartPlant Instrumentation. You can improve the accuracy of your design using DDP, which makes the isometrics accurate. Data comes direct from vendors.

SmartPlant 3D, SmartPlant Instrumentation, and PDS are the de facto standard solutions for instrument engineering and plant design. SmartPlant Instrumentation is a member of the SmartPlant Enterprise family, which includes SmartPlant P&ID, SmartPlant Electrical, SmartPlant Foundation plant information management, and SmartPlant Explorer for Web browsing and navigation of engineering data.

INTEGRATE WORK PROCESSES

With the DDP module, you can:

- Import dimensional data from instrument vendors into SmartPlant Instrumentation
- Manage instrument dimensional data
- Use the imported dimensions to create cut-sheets for components
- Use the 3D parametric routines in SmartPlant 3D and PDS to create a 3D representation the piping designer can place in the pipeline

With electronic vendor data, you do not need to retype into SmartPlant Instrumentation engineering tasks. Engineering, procurement, and construction (EPC) contractors do not have to keep up with the latest catalog information. Even when vendor data is not electronically available and you must enter it manually, the data is valuable downstream because it drives parametric modeling of the components. Spend less time building 3D

instrument components; they are automatically created in PDS Piping. You can avoid costly on-site rework because dimensional data quality is improved, ensuring correct fit of components, and verified by piping model interference checking. You can accurately create isometrics since flange-to-flange dimensions are accurate.

REFLECT NATURAL FLOW OF INFORMATION

The DDP module enables separate storage and management of three levels of dimensional data: default, working, and vendor, reflecting the natural flow of dimensional data and activities. The dimensional graphic library depicts components, such as control valves, and their dimensions, which can be used in the piping design process even if a project does not use 3D modeling. Create drawings directly out of SmartPlant Instrumentation. The parametric library offers more than 100 instrument components you can place in the SmartPlant 3D or PDS piping model that will be reflected in deliverables such as the isometrics. With the data export feature, you can move dimensional data between SmartPlant Instrumentation and SmartPlant 3D or PDS. Plus, you can place instrument components by tag number, correlated with SmartPlant P&ID for complete design verification.

The engineer can store and maintain default instrument and vendor dimensional data by group, manufacturer, or process connection. Transfer, store, and maintain certified vendor dimensional data for the instruments. Transferred to working data, it can be used for actual instruments in the database.

STREAMLINE YOUR WORKFLOW

The engineer classifies instruments by type and pre-assigns them to their DDP group in the instrument type profile, based on the existing dimensional data library and best practices. The designer then provides preliminary dimensions to the piping designer, filled from the standard dimensional data library and based on specified

basic instrument parameters. Dimensional tables are populated automatically. The piping designer can place the valve by its tag number from a list in SmartPlant 3D or PDS Piping. Through the dimensional tables, the program creates the 3D representation, which is placed in the pipeline. Alternatively, the engineer can print a dimensional data report or datasheet and transfer it to the piping design department.

When vendor bids have been evaluated, the dimensional data designer can supply the piping designer with more detailed vendor and manufacturer dimensional information electronically or manually, issuing vendor-certified dimensional data to piping. The user can view historical information for instrument status modifications. Manage your modified critical definitions like DDP group, instrument type, manufacturer, model, and process connections to enable quality control of suspect data. With the DDP module, you can generate various dimensional data reports to track suspect data, data status, default dimensional data, and vendor dimensional data.

Because the DDP module facilitates the fast, high-quality transfer of piping data from the vendor to SmartPlant Instrumentation to SmartPlant 3D or PDS, it saves time, ensures accurate design, and streamlines the work process.

ENJOY THE BENEFITS

- Reduce project risk by eliminating data re-entry, a primary cause of errors, rework, and schedule delay
- Streamline projects because the module can be tailored to specific workflows
- Increase productivity by enhancing work processes through integration between SmartPlant Instrumentation and PDS
- Reduce piping design work-hours by reducing time spent manually inputting dimensional data

- Improve communications between the control systems group, piping, and the supplier(s)
- Reduce checking time by minimizing dimensional data errors
- Enhance quality of deliverables by increasing data accuracy
- Increase data accuracy by providing control over suspect data during the entire life cycle

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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