



SMARTPLANT® IMPORT ASSISTANT

UPGRADE TO INTELLIGENT SMARTPLANT P&ID AND IMPROVE YOUR BOTTOM LINE

Intergraph® SmartPlant® Import Assistant, a migration utility, helps reduce the overall cost of legacy P&ID conversion. The product enables owner operators (O/Os) and engineering, procurement, and construction (EPC) companies to convert their existing P&IDs – created in AutoCAD, MicroStation, and PDS® 2D – to SmartPlant P&ID, enhancing value, quality, and accessibility. Converting legacy P&IDs to SmartPlant P&ID results in intelligent P&IDs that are governed by the design rules in SmartPlant P&ID, assuring accuracy of P&ID data and compliance with your design specifications.

With SmartPlant Import Assistant, O/Os and EPCs may choose to conduct the P&ID conversion themselves or have their engineering partners perform the work. A typical SmartPlant Import Assistant migration workflow would begin with creating the reference database or using the existing database from SmartPlant P&ID, including symbols, rules, etc. The SmartPlant Import Assistant rule manager would then create the rule set. Once the rule set is established, the set would be tested on several sample P&IDs. The rules would then be refined as necessary, followed by execution of the conversion. The final step would involve a routine check and manual cleanup.

BENEFITS

- Significantly reduce the labor expense of conversion.
- Test rules before conversion.
- Parse text with regular expression to SmartPlant P&ID database.
- Minimize operational disruptions and rapidly capitalize on intelligent P&ID availability.
- Comply with company standards and engineering rules using a flexible, configurable rule set.
- Use the rule set for multiple projects.
- Aid productivity with batch conversion.

- Take advantage of the post-conversion cleanup utility.
- Clearly identify items that are not resolved by the rules and then either update the rule or perform a manual action.

SMARTPLANT P&ID CONVERSION BENEFITS

- Gain a “single source of truth” for P&ID data, enabling all parties to access the P&ID for viewing or reporting via the Web (using SmartPlant Explorer).
- Improve the quality of the P&ID through rules and validation.
- Access accurate, current data, helping to avoid unplanned shutdowns and/or hazardous situations.
- Save time with change filtering and automatic updating features that enable faster updates from redlines to blacklines to comply with regulatory requirements, and provide up-to-date information to plant operations personnel.
- Create intelligent P&IDs, helping to shorten the commissioning cycle and speeding time to plant startup.
- Filter for data to examine design scenarios, associated costs, and operational impacts.
- Work with reliability solutions to assist in the scheduling of preventative maintenance and planned shutdowns.
- Promote emergency maintenance with fast, accurate access to system information to pinpoint problems, and quickly analyze potential impacts to safety or production.
- Facilitate turnaround planning by enabling plant personnel to efficiently filter for and document systems and assess the impact on related systems.
- Work in conjunction with SmartPlant Process Safety (HAZOP) analysis tools to significantly reduce safety checks and maintain audit trails for OSHA and EPA compliance.
- Support risk-based inspections by allowing safety personnel to quickly find and document critical systems, and assign last

inspection to plant items for planning.

- Promote production adjustment and reanalysis of processes for different feedstock scenarios.
- Consolidate a number of engineering plant databases, such as equipment data, valve lists, line lists, and instrumentation, into a single environment for maximum business advantage, enabling O/Os to add data over time through manual input.
- Benefit from reporting, data consolidation, and the ability to link to Standard Database for SmartPlant Reference Data.
- Define your own, open rules.
- Enjoy fast, consistent, and reusable results.
- Import additional data through XML or Microsoft® Excel®, and enrich the data by importing additional information.
- Increase P&ID quality.
- Enable corporate standards through SmartPlant Reference Database, such as symbols, rules, and reports.

MIGRATION INITIATION

To realize the benefits of having intelligent P&IDs and gain a competitive advantage, you must initiate the migration workflow. Intergraph can help you gain the rewards of owning intelligent P&IDs, including improving your company's bottom line with a clear and fast return on investment. For more information, see the SmartPlant P&ID Conversion Services Solution Sheet.

P&ID MIGRATION FROM LEGACY FORMATS TO SMARTPLANT P&ID

O/O Benefits

- Increased data quality and consistency.
- Easier data access and better data maintenance.
- Integration with complementary solutions, such as line sizing, SmartPlant Process Safety HAZOP analysis, process performance, business systems, document management, and instrumentation.
- Streamlined planning for plant maintenance and scheduled shutdowns.
- Ability to comply more easily with safety regulations.
- Part of SmartPlant Enterprise for Owner Operators.

EPC Benefits

- Faster project execution.
- Increased data quality with user-defined rules.
- Integration with up- and downstream tasks, such as instrumentation, piping, process, electrical, and mechanical.
- Part of SmartPlant Enterprise.

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 to make processes and infrastructure better, safer and smarter. The company'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, operation and data management of plants, ships and offshore

facilities. Intergraph SG&I provides geospatially powered solutions, including ERDAS technologies, to the public safety and security, defense and intelligence, government, transportation, photogrammetry, and utilities and communications industries. Intergraph Government Solutions (IGS) is a wholly owned subsidiary of Intergraph Corporation responsible for the SG&I U.S. federal business.

Intergraph is part of Hexagon (Nordic exchange: HEXA B; www.hexagon.com), a leading global provider of design, measurement, and visualization technologies that enable customers to design, measure and position objects, and process and present data.

For more information, visit www.intergraph.com.

