

SmartPlant® Instrumentation



A SINGLE SOURCE OF PLANT INSTRUMENTATION

SmartPlant® Instrumentation – the industry-leading instrumentation solution – helps you prevent failure by better managing and storing the history of your instrumentation and control system as well as prevent unscheduled shutdowns by better planning maintenance. This solution also assists in planning plant expansions or control system modernizations.

SmartPlant Instrumentation, powered by INtools®, provides a single source of instrumentation information that can be easily accessed and updated, and ensures consistency across the different instrument tasks and deliverables. SmartPlant Instrumentation pays for itself by providing information quickly and accurately, since there is a single source for the data, eliminating the need to search for information in multiple locations.

WHY CHOOSE SMARTPLANT INSTRUMENTATION?

SmartPlant Instrumentation helps you shorten time to market, improve compliance with safety and environmental regulations, and reduce instrumentation expenses. It provides an efficient way to engineer and manage your instrumentation and control system – adding value to your company's work processes and bottom line.

BENEFITS FOR OWNER/OPERATORS

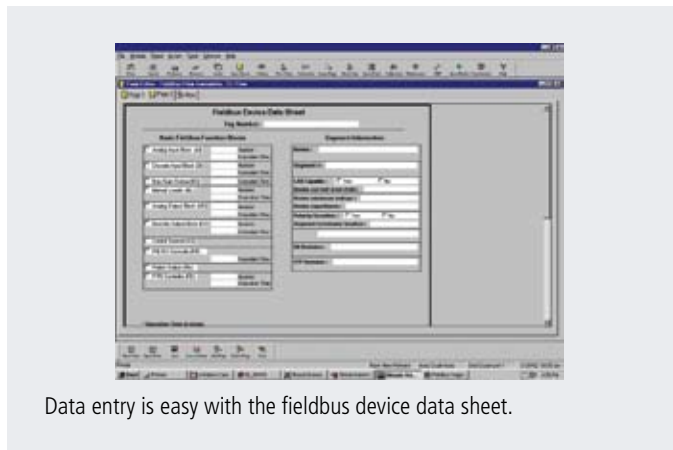
- Streamline data handover from design to operations and maintenance
- Enforce engineering standards with design rules and validation
- Streamline assembly of instrument construction and commissioning packages during commissioning and enjoy accurate, up-to-date test status for planning and reporting
- Promote rapid input of as-built data, providing a platform for safe, compliant startup and operations

- Enable all users – plant operations, maintenance, and management – to access consistent, current information from a single source
- Exchange data with vendors, saving time and increasing data quality
- Improve plant uptime, safety, and compliance through effective change management
- Integrate with business systems to provide access to instrumentation data across the entire life cycle through the SAP R/3 interface
- Better schedule plant shutdowns with accurate, current data and a long-range view of instrument behavior
- Maintain instrument performance through capture and analysis of calibration, as-found, and as-left
- Keep plant information up-to-date with as-built functionality and allow multi-project execution on an existing facility
- Add multiple process cases for production scenarios

BENEFITS FOR EPCS

- Enforce engineering standards with design rules and validation
- Facilitate faster, concurrent engineering – reducing hours and cost – because all instrumentation data is consolidated, managed, and revised in one database
- Support distributed inter-office and inter-company engineering using thin client technology
- Support fieldbus designs with rules and flexibility to mix-and-match the best instrument components
- Design automation with wiring
- Interface with up- and down-stream engineering, procurement, and construction tasks

- Use template design to increase productivity and data consistency, and take advantage of established best practices
- Create deliverables quickly, accurately, and automatically – directly from the database, including instrument loop diagrams
- Exchange data with vendors, saving time and increasing data quality
- Streamline procurement, helping to avoid surplus material or material shortages, protect schedule, and eliminate costs
- Use revision tracking to manage engineering changes
- Enable specific plant views to be extracted from the database, supporting construction



Data entry is easy with the fieldbus device data sheet.

GAIN VALUE ACROSS THE WORKFLOW

SmartPlant Instrumentation addresses instrument-related work processes throughout the plant life cycle.

ENGINEERING

Use SmartPlant Instrumentation to create and manage instrumentation data in a single database, facilitating faster, concurrent engineering and reducing work hours and cost. The software ensures accurate data and consistent deliverables, effectively manages change, and optimizes design and review scenarios. To ensure data integrity, the software offers the powerful capability to create engineering rules.

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses, and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better

DESIGN

SmartPlant Instrumentation flexibly adapts to your design process. Conceptual data can be entered and refined, and documents can be created at any time during the project cycle to review or use the data. It can interface with DCS component vendors such as Emerson Process Management and Yokogawa to reduce design time and increase data quality.

PROCUREMENT

Used with SmartPlant Materials, powered by MARIAN® – Intergraph's material procurement and management system – SmartPlant Instrumentation eliminates handover of instrument design data to procurement, shortening the procurement and delivery cycle and supporting downstream change control. You can minimize materials surplus/shortages, reducing project cost and schedule. SmartPlant Instrumentation also provides a solid basis for other procurement methods in easily extractable specialty instrument and bulk material information.

CONSTRUCTION

SmartPlant Instrumentation lets you extract views of the control system from the database to create work packages, assign them to subcontractors, and then track progress/completion.

COMMISSIONING

SmartPlant Instrumentation allows you to create test packages during commissioning. It streamlines instrument test package assembly and provides accurate, current data for planning and reporting. SmartPlant Explorer and SmartPlant Markup add value by providing data access and red-lining capability across the Web.

OPERATIONS & MAINTENANCE

Along with the P&ID, instrumentation data is the most critical to access during plant operations. SmartPlant Instrumentation provides a single source of current, accurate, and consistent data that all plant personnel can quickly access to perform their duties and improve plant uptime, safety, and compliance.

plants and ships, and protecting critical infrastructure and millions of people around the world.

For more information, visit www.intergraph.com.

