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## **SmartPlant Instrumentation for Beginners**

Day 1 Introduction to Smart Plant Instrumentation

What SPIN is and is not

Instrument Index

Creating, modifying and deleting Loops, Tags, Instrument Types etc

Browser

Creating, modifying and deleting Browser Views, Filters and saving to Excel

Day 2 Process Data and Calculations

Performing sizing calculations, process data reports, interface with other SPIN modules

**Specifiction Sheets** 

Spec Sheet data, creating and modifying spec sheets

Day 3 Wiring

Creating new default and production wiring objects (panels, strips, terminals, apparatus, cables)

Connecting objects, signals, general signal

Day 4 Enhanced Smart Loop

Symbols, symbol libraries, layouts, templates and title blocks

Day 5

Cable schedules, reporting, cross wiring and IO allocations.

## **SmartPlant Instrumentation for Users**

Topics Covered:
$\hfill \square$ System and Project Administration Overview
☐ Instrument Index
☐ User Report Interface (Browser Module)

<ul> <li>□ Process Data</li> <li>□ Calculations</li> <li>□ Specifications</li> <li>□ Wiring</li> <li>□ Loop Diagrams</li> <li>□ Hookups (Installation Details)</li> <li>□ Brief overview of: Field Bus, External Spec Editor, External Process Data Editor and Integration Specific to SPI</li> </ul>
SmartPlant Instrumentation Customization and Data Management
Topics Covered:    SmartPlant Instrumentation database overview   Introduction to InfoMaker - libraries, queries, reports   Intro to Creating and customizing reports in InfoMaker   Intro to Customizing specifications internally and using InfoMaker   Setting up MS Access for reporting   Intro to Data import   Intro to Use of Merger utility   Interfaces - P&ID (basic installation of import links only), DCS, vendor calculation software   External Spec Editor   Intro to Field Bus   Revisions and revision control
<b>SmartPlant Instrumentation Advanced Wiring and Reporting</b>
Topics Covered:  Using new wiring equipment entities to create "real world" panel layouts Panel location and hierarchy setup Working with Explorers - Domain, Reference, Wiring and Loop Networked wiring design - Foundation Fieldbus, Profibus and HART devices wiring (optional) Room, Panel, and Rack Layout drawing creation Customization of SmartPlant Report Generator Symbols Expanded Field Bus design
SmartPlant Instrumentation version UPDATE
Topics Covered:  □ Practical considerations and requirements for upgrade to version 2009  □ New Library of Specification Forms  □ Cross Form mapping (multi-Specification Form Browsers)

☐ Defining page size for a multi-tag Specification page
☐ Additional fields added to the Index Browse View
☐ User defined macro functions for SmartLoop Macros
☐ Enhancements in Custom Loop generation
☐ External Validation and Calculation functionality in Rule Manager
☐ Updated Pipe Standards table in the Process Data Module
□ Calibration Module enhancements
☐ Changing Fieldbus tags back to Conventional
☐ Administration Module enhancements and additions
☐ Enhancements to SmartPlant Instrumentation Interfaces
InfoMaker Customization
Topics Covered:
☐ Standard operations in InfoMaker
□ Database connections
□ Libraries
□ Queries and Reports in InfoMaker
☐ Using PSR files within SmartPlant Instrumentation
☐ Creating executable report
□ Specification customization:
Using SP_STYLE.PBL
<ul> <li>Customizing Spec forms within SmartPlant Instrumentation</li> </ul>
Customizing Spec forms in InfoMaker
□ Customizing Title Block
☐ Creating custom PowerSoft Browser
☐ Instrument Index Browse customization