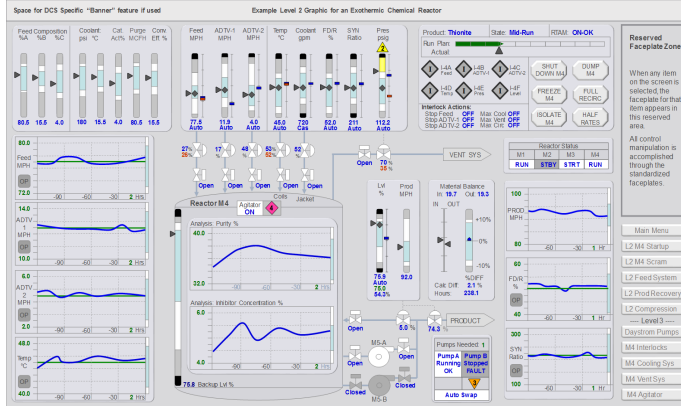


High Performance HMI™

Improve operator situational awareness

Challenge

For more than 30 years, industrial processes have been controlled through computerized schematic representations of the plant. Often in today's plants, displays contain poorly designed graphics with poorly presented numeric data, which in turn causes inefficiencies in plant operations. Poor HMIs are cited as contributing factors to major industrial accidents.



Solution

For processes to be effective, operators must be effective. PAS provides operators with the right tools to effectively run the process, detect abnormal situations, and respond quickly. Applying High Performance Human-Machine Interface (HMI) principles increases operators' situational awareness, resulting in quicker decision making and more accurate operations.

PAS High Performance graphics convert raw data into actionable information. This is accomplished by using color to effectively draw the operator's attention to abnormal conditions, leveraging multiple visualization methods, and emphasizing easily-scanned analog depictions.

PAS High Performance Object Libraries and comprehensive methodology for designing effective, high-performing displays provides operators with information needed to control the process and respond to deviations rapidly and effectively.



Key Benefits:

- Optimizes operator awareness of process states
- Enables immediate detection of abnormal conditions
- Assists in rapid decision making
- Displays key performance indicators and process trends

Seven Steps to High Performance HMIs

Based on extensive HMI design and implementation experience, PAS uses a seven-step methodology for designing effective, high-performing displays providing operators with information needed to assess process states and to respond quickly and safely.

The seven-step methodology is comprised of the following:

1. Develop an HMI Philosophy and style guide
2. Assess and benchmark existing graphics against the HMI Philosophy
3. Determine specific performance and goal objectives for controlling the process
4. Determine the control manipulations required to achieve the objectives
5. Design and build high performance graphics using the design principles from the style guide
6. Install, commission, and train the operators
7. Control, maintain, and periodically reassess the HMI performance



Details on the seven-step methodology can be found in the technical book by PAS, “The High Performance HMI Handbook.” Additional information is provided in two white papers available on www.pas.com.

High Performance HMI Services

For more than two decades, PAS has designed Human Machine Interfaces and defined HMI best practices. PAS has delivered High Performance HMI projects on a wide range of processes and control systems and trained hundreds of engineers, operators, and technicians on design and implementation. PAS High-Performance HMI services include:

- Philosophy and Style Guide Development
- HMI Assessment and Benchmarking
- Design, Development, and Implementation
- Training

Graphic Object Libraries

The PAS packaged High Performance Object Libraries incorporate the industry-leading principles described in “The High Performance HMI Handbook.” The libraries include common process schematic symbols, instrument renderings, and navigation interfaces. Object libraries for the various control systems include the same basic shapes and attribute characteristics, and are designed to work similarly regardless of the control system type deploying HMI graphics, including systems from disparate vendors.

For information on our High Performance HMI services, email info@pas.com.

About PAS

PAS, the OT Integrity company, delivers software solutions that prevent, detect, & remediate cyber threats; reduce process safety risks and optimize profitability; and enable trusted data for decision-making. PAS helps industrial organizations Ensure OT Integrity including 13 of the top 15 refining, 13 of the top 15 chemical, 4 of the top 5 pulp and paper, 3 of the top 5 mining, and 7 of the top 20 power generation companies.

For more information, visit www.pas.com.

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- ✓ Power
- ✓ Pulp & Paper
- ✓ Refining



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