

Process, Power & Marine



SmartPlant® P&ID and FALCONEER™

Process Performance Solution

Make plants smarter, safer, and more profitable by design

Intergraph Process, Power & Marine has joined forces with FALCONEER Technologies to create an interface between engineering data in SmartPlant P&ID and FALCONEER that allows engineers and operators to make decisions to optimize a plant's productivity. This real-time process monitoring and diagnostic suite works with a wide variety of existing process control systems to increase the value of a plant's information.

FALCONEER takes the plant engineering data from SmartPlant P&ID and adds intelligence by using the plant's process knowledge combined with the plant process data from the control system. This enables the product to comprehensively account for all process information by concurrently monitoring and alerting at the highest, process-wide level as well as the individual point level – enabling operators, engineers, and managers to focus on the information that is most critical to optimize plant production, product quality, and operations. In addition, the solution helps improve process and design quality in the engineering phase. FALCONEER can interface with simulation models, SmartPlant P&ID, and historical or manually entered process data – simulating the process behavior.

Improved profitability, safety, and efficiency

- Identify energy saving opportunities
- Reduce operating costs by finding potential operational issues before they actually occur
- Improve process and instrumentation reliability
- Prevent safety incidents and environmental releases
- Leverage process data and knowledge to provide critical solutions in a timely and cost-effective way

Powerful performance functionalities

- Monitor key performance indicators (KPI) and metrics in real time
- Receive predictive notifications of under-performing assets before they impact the bottom line
- Ensure designed plant performance and assure data quality to Asset Management software
- Optimize plant design and instrumentation by performance and costs before it is built

Tools to aid the decision-making process

- Automatically generate P&ID-based engineering models coming from SmartPlant P&ID
- Help prevent inaccurate data and validate information used in asset management systems

Real-world benefits from a Process Performance Solution

- Validate sensor and process information to help make control decisions and meet environmental and safety reporting requirements
- Avoid environmental release or process safety events resulting from sensor or process failures
- Take advantage of timely alerts that signal pending sensor, equipment, or process failures or abnormal conditions to avoid unscheduled shutdowns
- Reduce costs by eliminating unnecessary preventative maintenance instrumentation calibration
- Reduce operational costs with improved real-time, on-line monitoring of key dynamic performance indicators such as energy and natural gas costs
- Improve production efficiencies by avoiding significant fluctuations from uncontrolled process variables
- Provide continuous, real-time access to information available in DCS and SCADA systems – making the information easier to use

- Enhance existing DCS and SCADA systems by validating settings
- Take advantage of comprehensive diagnostic coverage at both process level and point level

The Process Performance Solution adds real-time process data from a control system to the SmartPlant P&ID process model-based on specific rules and history files – and alerts users to any problems on the horizon. Combining these technologies couples information captured in SmartPlant P&ID with the wealth of information and wisdom provided by FALCONEER Process Performance Monitoring – helping to improve process performance by making the sensors and processes smarter, more responsive, and safer.

For more information about SmartPlant P&ID and FALCONEER, visit Intergraph Process, Power & Marine at ppm.intergraph.com or FALCONEER Technologies at www.falconeertech.com