SOLUTION SHEET

Octave Tempo Safety System Performance

Ensures independent protection layer (IPL) function availability and performance

Challenge

The fundamental question for any operations manager is whether it is safe to run the facility. Yet, the information required to make this decision is not readily available. The data is locked in disparate systems and spreadsheets creating the potential for errors and delays in decision-making.

Standards, such as IEC 61508 and 61511, govern the monitoring and maintenance of facility independent protection layer (IPL) systems, including tracking and documenting availability, demand rate and failures, preventative maintenance and validity testing. Facility personnel use the same manual data collection methods to drive standards compliance, which expends costly time and resources.

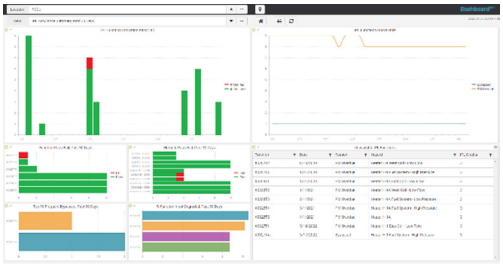
Facilities must maintain high reliability in their safety systems. There is no room for error. Yet IPLs can be bypassed in multiple ways, and manual processes limit visibility into availability, performance and overall risk. These critical activities are too important to remain unautomated.

Benefits

- Improves plant safety and operational awareness of IPL performance
- Reduces operational risk and unplanned downtime because of shutdowns or turnarounds
- Optimizes plant resources by automating IPL integrity reporting
- Provides audit readiness for IEC and OSHA compliance

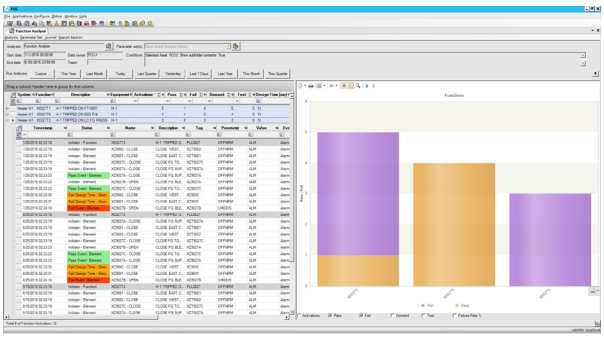
Solution

Octave Tempo Safety System Performance (formerly PAS IPL Assurance) provides accurate, near real-time insight into and validation of IPL functions. It facilitates the lifecycle support of all safety system infrastructure within a facility or organization. It also provides the means to analyze safety function performance, ensure documentation of proof testing and manage required test schedules.



With Tempo Safety System Performance, you can:

- Ensure the IPL is functional via automated notification of failures to appropriate personnel.
- Reduce production interruptions by ensuring a complete record of live demands to serve as proof tests.
- Streamline validation testing that can reduce turnaround workloads.
- Ensure accurate safety integrity level (SIL) determination by comparing historical demand rates to design criteria.
- Simplify compliance and ensure audit-readiness.



- Maintain complete documentation of all safety functions and testing, with forecasting for maintenance testing plans and audit evidence as required by IEC 61508 and IEC 61511.

Centrally manage your IPL functions

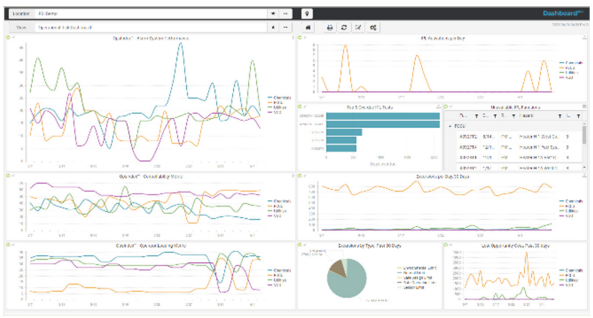
Tempo Safety System Performance provides the means to aggregate the design information for IPLs. It supports test and maintenance schedule intervals, process safety times, design times and annual demand rate assumptions. It also facilitates the analysis of IPL function performance, documenting proof of testing and managing required test schedules.

All activations are monitored and logged to deliver the safety integrity level (SIL) required for safe operations. Validation testing is recorded upon activation, with plant personnel notified immediately in the event of a failure or fault. Key capabilities include:

- IPL performance management
- Testing and maintenance management
- Demand on safety system rate tracking
- Reporting on safety system performance
- Status of safety related alarms
- IPL bypass management
- Safety and operational risk visualization
- Actionable analytics of performance

Comprehensive operations risk management

Tempo Safety System Performance is part of Octave Tempo Control System Effectiveness (formerly PAS PlantState Integrity), which provides a single platform to deliver unique insights into process safety risk. The solution uses a single data capture layer to monitor the performance of control loops, operational limits and independent protection layers (IPL). By combining these metrics into a single pane of glass along with exception-based reporting, Tempo Control System Effectiveness provides actionable insights to ensure companies operate their facilities effectively while improving safety and environmental performance.



Learn More

About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, propert, and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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