Barrier health lifecycle management solution

Digital transformation for increased process / functional safety

aeShield® offers a single process / functional safety engineering and design environment to execute risk analysis (PHA/LOPA) and create functional safety protection layer designs using an expert system to automate creation of safety integrity level (SIL) calcs, safety requirements specification (SRS), cause and effect (C&E) and test plans.

Octave Tempo Operating Procedures (formerly AcceleratorKMS) makes it easy for organizations to manage, govern and distribute up-to-date critical operational content to field workers, ensuring operations run smoothly and efficiently.

Octave Tempo Control System Effectiveness (formerly PAS PlantState Integrity) platform includes solutions for alarm management, boundary management, control loop monitoring and tuning and managing independent protection layers (IPL) that work together to ensure safe, reliable and compliant operations.

Barrier health lifecycle management is a continuous process essential to maintain the health of barriers that prevent potential high consequence loss of containment events.



With aeShield you can:

- Perform risk assessments (PHA/LOPA) to identify risk gaps
- Establish performance requirements for all safety-critical IPLs

With Tempo Operating Procedures you can:

- Digitally transform test plans
- Ensure competence in executing test plans

With Tempo Control System Effectiveness you can:

- Measure the performance of protective barriers such as control loops, alarms, integrity operating windows (IOW) and safety functions
- Track loops in manual, alarm suppression and bypasses

Tempo Control System Effectiveness integration:

- Leverage successful demands as partial proof test credit
- Track protection layer bypasses to identify barrier weaknesses / risk gaps
- Track demands to identify ineffective/failed protection layers and to identify barrier weaknesses / risk gaps
- Build real-world demand and performance data into future designs

Tempo Operating Procedures integration:

- Track on-time / late instrument testing
- Classify and track safety-critical instrument failures
- Leverage instrument test results to rapidly optimize mechanical integrity testing or assess testing deferral risk impacts
- Maintain real-world “prior use” failure rate data library

Learn more

aeShield® →

Tempo Operating Procedures →

Tempo Control System Effectiveness →