



SLM **MODULES**

Safety Lifecycle Manager

HAZOP MODULE

Perform, document, standardize and share HAZOP studies using your HAZOP protocol. Designed to be the successor to legacy PHA/HAZOP software tools, the HAZOP



module not only offers an intuitive Human-Machine Interface to accelerate HAZOP studies & guickly view HAZOP data, but gives organizations the ability to standardize their processes. Instant reports and KPIs reduce the cost of third party experts, & the underlying data allows SMEs the ability to study how the organization executes risk management.

LOPA MODULE

Conduct LOPAs with built in LOPA worksheets using scenarios readily available a click away in the HAZOP module. Intuitive interface and automatic calculation of Pass/Fail status based



on required Risk Reduction Factor (RRF) simplifies LOPAs. Asset synchronization from defined IPLs makes instrumented and non-instrumented systems available in other modules. LOPA data can even be imported from other industry tools. Automatically populate your IPL Registers and complete IPL Assessments with easy, user-friendly Tasklist functionality.

BOW TIE MODULE

The Bow Tie Module incorporates your existing hazard analysis data to facilitate Risk Analysis and Risk Assessments on your mitigation and prevention barriers. Execute Bow Tie methodology using your existing HAZOP and LOPA data to conduct Risk Analysis and Risk Assessments on your mitigation and prevention barriers. As a single source for all safety lifecycle data, the SLM® platform incorporates data from other modules to use in the Bow Tie Module. With the barrier assurance workflow, users have a complete picture of all barrier levels to determine the total risk of a hazardous event within the plant.



INSTRUMENTED SYSTEM MODULE

Identify, document and manage instrumented IPLs and their assets and equipment. A Safety Requirements Specification (SRS) can be a complex document. The SRS defines requirements for many topics and requires a significant number of supporting documents. Our SLM® software's SIL Calc functionality is fully implemented and is now linked to the SRS for fast access to related safety specifications. The module comes standard with a SIS and SIF SRS templates that incorporate ISA/ANSI 84.00.01 requirements and industry best practices. Users can define voting logic, and input/output structure of instrumented systems. Users can automatically create cause and effect matrices for all safety related functions. Systems are available automatically and immediately in the Operate/Maintain/Integrity Module to begin logging events.





RELIEF SYSTEMS MODULE

management solution that provides a comprehensive approach to the management of pressure relief systems. The module is globally accessible, allowing for plant or enterprise-wide standardization of comes equipped with data sheet templates; reducing confusion on your relief systems through the entire Lifecycle from initial identification and design through you are able to use Tasklists for Relief System engineering checks, generate Relief System and equipment registers, produce Relief Systems data sheets, or sync IPLs identified in LOPA.



ACTION ITEM TRACKER

The Action Item Tracker Module is a centralized location where users can create and access action item information from all modules for follow-up & reporting. Data relating to the action item is linked across modules and readily available for reference purposes. Custom reports and KPIs are available with a click of the mouse.

NON-INSTRUMENTED SYSTEMS MODULE

The Non-Instrumented Systems module captures, organizes and automatically generates reports on IPLs and safeguards not captured in the Instrumented Systems & Relief Systems modules. The module



comes configured with generic data sheets for common safety systems to include pressure regulators, mechanical stops and check valves. Flexibility built into the software allows you to create custom safety systems and data sheets using your organization's own standards and procedures. Record testing and maintenance activity and upload documents for any non-instrumented safety system.

FUNCTIONAL SAFETY ASSESSMENT (FSA)

MODULE

The SLM® solutions Functional Safety Assessment module allows you to readily complete a stage 1 through stage 5 FSA in a standardized format -- ensuring consistency throughout your organization. This tool allows



you to define requirements for an FSA then use the application to improve the effectiveness and efficiency of execution. The integration of all safety Lifecycle data provided by SLM® software also allows for effective integration of FSA data with other critical data such as HAZOP and LOPA studies, Safety Requirements Specifications and SIS Performance

OPERATE/MAINTAIN MODULE

The Operate/Maintain module is designed to capture the in-service performance of protective systems, functions and associated devices within a processing facility, and report on the history and status of these entities. Data captured over time allows managers proactively identify performance trends and address any bad actors. System



users can easily define Test Procedures for the protective systems and begin recording test data immediately. The module uses device event data to compile and generate prior use data and subsequent reliability statistics.

MANAGEMENT OF CHANGE (MOC) MODULE

SLM® software's MOC creates a standardized 10-step approach for your Change Management process. The software workflows provide tools which facilitate the evaluation and control of design modification, operation, technology, facilities, equipment or



procedures. Progress through your MOC with the required checklists, assessments, reviews and approval processes -- all generated within SLM® solutions MOC. Quick Links to Process Safety Information within the other modules accelerates the MOC process and ensures accurate analysis of potential hazards. As with all of the modules, the flexible SLM® platform makes configuration fast and inexpensive.

