

Quantifying Risk

Perhaps you are unsure of your company's risk position or you need help identifying and quantifying your risks. Let our team analyze your facility and perform a Risk Assessment and Risk Estimation. We have trained facilitators, skilled in the various acceptable methodologies for implementing Process Hazard Analysis (PHA), including Hazard and Operability (HAZOP) study and the What-If technique. We can provide these services for your Capital Projects and Facility Operations, or as part of your corporate Management of Change (MOC) process. We can then build upon the results of those studies using the Layers of Protection Analysis (LOPA) technique to identify the desired integrity level for your critical protective functions.

Mitigating Risk

Does your facility have quantified hazards but you are not sure how to best mitigate them? We offer comprehensive process safety services including design, implementation, commissioning, and startup of safety systems. We specify instruments, size control valves, design control panels, specify and configure safety PLCs, design relay systems, and develop test plans. We have significant experience with a variety of safety systems, including Safety Instrumented Systems (SIS), Fire & Gas Detection, Life Safety Systems (LSS), Emergency Shutdown (ESD), and Burner Management Systems (BMS).

Are you having trouble justifying a safety project? With our unequalled combination of standards and committee work, our formal training, and our extensive project experience, we are uniquely qualified to assist you by performing return-on-investment calculations to justify project funding.

Our Team is Ready to Help

If you have a process safety need, from the simple to the complex, we have a cost-effective solution. We offer our customers a single source for comprehensive process safety services throughout the project lifecycle. Reduce your risk by letting AE Solutions be a part of your next safety project.

Project Services

We provide the following services associated with risk management:

- Development of Company Safety Instrumented System Project Standards
- Process Hazards Analysis Facilitation and or Participation
- Layers of Protection Analysis (LOPA) and Safety Integrity Level (SIL) Selection
- Safety Instrumented System Cost Justification
- Safety Instrumented Function Identification
- Safety Requirements Specification
- Safety Instrumented System Conceptual Design and SIL Verification
- Safety Instrumented System Detailed Design
- Safety PLC Configuration and Programming
- Safety Instrumented System Commissioning
- Safety Instrumented System Pre-Startup Acceptance Testing
- Safety Instrumented System Functional Testing

Operations & Maintenance Consulting Systems & Services

- Functional Process Safety Consulting Services
- Development of Company Safety Instrumented System Operational Standards
- Development of Company Safety Instrumented System Maintenance Standards
- Instrumentation and SIS Calibration & Testing Services
- Functional Safety Lifecycle Data Management Tool
- PSM Compliance Services
- MOC Compliance Services