

Process Safety, SIS & Reliability Solutions

We help our clients reduce process risk, strengthen safeguard performance, and improve audit readiness. Clients choose us for our practical solutions across safety life-cycle activities and operational reliability.

Trusted Support Across: Refining | Chemical | Upstream | Midstream/Pipeline | Renewables

Standards: ISA/IEC 61511/62443 | OSHA 1910 | NFPA 85/86/87 | API 521/556/670 | ISA 18.2 | EEMUA 191

Services

Risk Studies

- Process/Dust Hazard Analysis (PHA/DHA)
- Layer of Protection Analysis (LOPA)
- Quantitative Risk Analysis (QRA) via Fault Trees
- Control Systems Cyber Vulnerability Assessments

Safety System Compliance Documentation

- Safety Requirements Specification (SRS)
- SIL Verification of SIS Solutions
- SIS/Critical Safeguard Turnkey Projects
- High Integrity Pressure Protection Systems (HIPPS)

Operational Reliability

- Control / SIS Operational Effectiveness
- Alarm Management
- Instrument & System Reliability
- Proof Test Procedures

Audits, Reviews & Documentation

- PSM Audits
- SIS Documentation Assessments
- Action Item Closure Support
- Training

Approach

1) Define the Risk

Evaluate hazards, safeguards, alarm performance, and reliability trends using PHAs, LOPAs, FTAs, and focused SIS/PSM assessments.

2) Build Practical Solutions

Translate findings into clear SRS requirements, proof test procedures, implementation packages, and prioritized improvements that fit real operating constraints.

3) Sustain Performance

Support revalidations, audits, action items closure, and documentation quality to maintain consistent SIS/PSM performance across the life-cycle.

Contact Us

832.439.3793 | camiller@SISSILverstone.com | www.sissilverstone.com

GET IN TOUCH



About Our Functional Safety Practice

These are the technical leaders our clients trust for critical safety and risk-reduction projects



Curtis Miller

General Manager /
Principal Safety Engineer

With 22 years of focused functional safety consulting and nearly 40 years in controls engineering, Curt provides senior leadership in process safety, SIS, and safety life-cycle support. His background spans upstream oil & gas, refining, chemical, midstream, and general industry operations, where he has helped clients strengthen process safety management programs, improve safety system performance, and implement practical, effective engineering solutions. Clients value his depth of experience, sound judgment, and ability to guide complex projects with a clear, risk-based approach from study and design through execution and ongoing lifecycle support.

Certifications:

- Registered Professional Engineer – CSE
- Certified Functional Safety Expert (CFSE)
- Qualified ISA instructor
- Vetted PHA Facilitator (End User Listing)
- Certified Dust Hazard Analysis Leader
- IIAR PSM/RMP Certificate Course (+Exam)



Monica Hochleitner

Principal Safety Consultant

With over 30 years of diversified experience in automation and control systems, Monica provides technical leadership in design, consulting, configuration, installation, testing, and commissioning of distributed control systems, safety instrumented systems, and alarm management solutions. Her experience spans oil and gas, chemical, and petrochemical facilities. Monica is an active contributor to the industry serving on the ISA 18.2, ISA 61511, and ISA 99 committees, and is a member of the COBEI – Comitê Brasileiro de Eletricidade (CE-03:065.01). Monica served as a coordinator of the ISA 61511 Working Group D4 for Latin America.

Certifications:

- Certified Functional Safety Expert (CFSE)
- Functional Safety Engineer (TÜV)
- Qualified ISA instructor
- Vetted PHA Facilitator (End User Listing)



Mariano Paoli

Principal Safety Engineer

With over 14 years of experience, Mariano brings a strong expertise in process and functional safety, automation, and instrumentation and electrical systems for complex industrial operations. He has supported clients across refining, chemical, offshore, and fertilizer facilities, with project responsibilities spanning early engineering and design through commissioning and startup. His work is defined by strong technical analysis, effective use of modern engineering tools, and a practical, implementation-focused approach that helps clients execute safety and automation projects with confidence.

Certifications:

- Registered Professional Engineer – CSE
- Certified Functional Safety Professional (CFSP)
- MKO Process Safety Practice Certificate

150 years of combined oil and gas industry experience informing practical process safety, functional safety, and control systems solutions.

Backed by a strong team of engineers and specialists, our leadership ensures clients receive the expertise and continuity needed for critical safety success.

