



Functional Safety Management

Safety Lifecycle Services according to IEC 61511

The topic of functional safety involves much more than just installing SIL-certified hardware and software components. It requires expert knowledge that is up-to-date with the latest technologies, standards and guidelines.

Plant operators who use Safety Instrumented Systems (SIS) to help reduce risk – and this includes almost all chemical plants, refineries, distillation and combustion facilities – must implement a system for the management of functional safety. Operators are required to demonstrate that they implemented measures to reduced risks to an acceptable level.

Effective functioning of Safety Instrumented Systems (SIS) elements over the entire lifecycle of a plant not only depends on the correct hardware and software and on the processes employed for planning, operation and modification.

The basis for these processes are:

- Safety Lifecycle (SLC)
- Safety Integrity Level (SIL)

The SLC follows the lifecycle of process plants and is divided in phases such as risk analysis, safety requirement specification, planning, installation and commissioning, operation, modification and finally decommissioning.

The SIL is a discrete level (one out of four) allocated to the individual safety instrumented functions (SIF) and specifies the required safety integrity of the SIF. The safety integrity is the ability of a SIF to perform its duty as and when required; and has to be maintained over the entire safety lifecycle.

Errors in the early stages of a project are often complex and expensive to correct later on. We seek to avoid systematic errors in all project phases with our standardized engineering guidelines and verification templates.

Interested? Contact us!
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Your benefit

- Faster and safer project implementation and commissioning through standardized processes
- Avoidance of systematic faults
- Reduced development time and cost with our interdisciplinary team of experts with process and automation know-how
- Accelerated plant acceptance with our tailor-made safety concepts

Our service offer

- Management and assessment of functional safety-audits
- Uniform verification and validation documentation
- Planning and design of the SLC (safety plan)
- Hazard and safety assessment
- Allocation of safety functions to protection layers
- Safety requirement specification (SRS)
- Verification and validation (e.g. SIL verification, HW / SW audit)
- Management of change
- Functional safety assessment (FSA)
- Training

