

# **FUNCTIONAL SAFETY**

**At Triple i, our Engineering and Technology team has extensive experience with Functional Safety and Safety Systems across a diverse range of projects and industries.**

Our personnel hold qualifications in Functional Safety Engineering, including TÜV Functional Safety Engineer (TÜV Rheinland) allowing us to engage in various stages of the functional safety design, maintenance, and operations lifecycle.

Using the hazard identification and risk assessment tools at the core of our business (i.e., HAZOP/CHAZOP), we can facilitate the early stages of risk assessment and identification of SIF's (Safety Instrumented Functions) in your process and functional safety design. Our team has experience in the practical application of the following tools across a range of industries:

- Layer of Protection Analysis (LOPA)
- Hazard and Operability Study (HAZOP)
- SIF Identification & Safety Integrity Level (SIL) Determination
- System and Safety Requirements
- Specification (SRS/SSRS) (including software applications)
- Safety Dossier Development
- Safety Software Design & Integration
- Maintenance and Operation
- Functional Safety Management
- SIL Verification
- Functional Safety Audit

We ensure your system complies with industry standards including:

- ✓ **IEC61508** – Functional safety of electrical/electronic/programmable electronic safety-related systems
- ✓ **IEC61511** – Functional safety – Safety instrumented systems for the process industry sector

We can also provide audit and SIL verification services to ensure your system provides the risk reduction and compliance you need.

**For more information about any of our Functional Safety services or to find out more about our alternate technical safety and risk management services, please contact us.**