

## Risk Capability Statement

### HAZOP (AS IEC 61882 compliant)

We conduct HAZOP (HAZard and OPerability) studies for clients including all aspects of preparation, facilitation, scribing (minute taking), report preparation and if requested, recommended action tracking and closeout. Our HAZOPs are conducted in accordance with the guidance of AS IEC 61882:2003. Typically we use our own version of PHA Pro 8 (by Dyadem) to record the HAZOP minutes and produce the reports though use of client HAZOP logging software and tools is also possible.

### HAZID/ Technical Risk Assessments

We conduct HAZID (HAZard IDentification) studies for clients including all aspects of preparation, facilitation, scribing (minute taking), report preparation and if requested, recommended action tracking and closeout. HAZIDs are typically focussed at the identification of hazards to health, safety and the environmental that might arise from carrying out an activity. They typically include the steps from AS NZS ISO 31000-2009 of hazard identification and risk assessment (although the latter is not essential). As such a HAZID is a form of technical risk assessment.

### Quantitative Risk Assessments (QRA)

We conduct various types of quantitative risk assessments including consequence modelling of fire and explosion events, fault tree and event tree modelling of events, modelling of likelihood based upon Layers of Protection Analysis (LOPA).

### SIL Studies/ Functional Safety (AS 61508/AS IEC 61511 compliant)

We provide a wide range of services related to "Functional Safety" as described in AS/NZS 61508, AS IEC 61511 (for Functional Safety in the Process Industries) and AS 62061 (for Machinery Safety). This includes Safety Integrity Level (SIL) studies to determine target SILs for Safety Functions (using both LOPA and Fault Tree methods), design of Safety Functions and Safety Instrumented Systems (SIS) including the instrumentation, programmable hardware and software logic, determination of achieved SIL and Proof Test Intervals, Factory and Site testing and commissioning of the Safety Instrumented System.





## RISK

### Loss Prevention/ Insurance Related Site/ Project Reviews

We provide insurance industry relevant loss prevention site or project surveys and related review report.

We have experience in reviews for and on behalf of insurance companies or brokers of the risk profile of businesses or sites, with special focus on “Property Damage” and “Business Interruption” coverage of industrial operations.

### Process Safety Management

We provide consulting services in regards to “process safety management”, including improvements on how organisations manage safety related to the nature of the chemical or other transformational production processes. We have provided advice on the management systems to systematically manage the hazards and risks of chemical processes.

Our references on this subject include the various AIChE publications.

We provide consulting services in regards to Major Hazard Facilities (MHFs) and management systems dealing with such facilities. Our references include the NOHSC codes.

We have experience in reviewing an organisation’s culture for alignment to that described by some authors as a High Reliability Organisation (HRO).

### Occupational Health & Safety

We provide assistance to establish setup, improve, communicate or audit safety management systems.

We are familiar with the requirements of AS 4801:2001 and how this standard can be made to work in a practical setting.