



Marcus Punch Pty. Ltd. *Risk and Reliability*

Presents

Functional Safety for the Mining Industry

An Integrated Approach Using AS61508, AS62061, ISO13849 and AS4024.1

1-day workshop

AS61508, AS62061 and AS4024.1 are Australian Standards which describe the requirements for assuring the safety of industrial machinery. They are now mandatory within the NSW mining industry and are finding increased usage within other machinery-based industries. This workshop presents the core concepts, methodologies and practices of the AS4024.1 / ISO13849 and AS61508 / AS62061 approaches. The focus of the day is compliance with the various requirements for specifying, designing, installing, verifying, operating and maintaining safety-related control and protective systems for machinery. Worked examples and case studies from the mining / resources sector will be presented.

Who Should Attend?

Anyone who is involved in, or responsible for the specification, design, installation, verification or operation / maintenance of industrial machinery and control systems. The course will particularly benefit project managers, controls / automation / electrical engineers, mechanical engineers, electrical and mechanical maintainers, machinery vendors, OH&S practitioners, plant managers and others who may become involved in the machinery safety lifecycle process.

10 Things You Will Learn.

1. The purpose, content and applicability of the AS61508, AS62061, AS4024.1 and ISO13849 standards.
2. What SIL, CAT and PL actually mean, why they are required and how to determine what they should be for your plant.
3. The timing, requirements and deliverables at each step of the AS4024.1 / ISO13849 and AS61508 / AS62061 processes.
4. What 'tolerable risk' and ALARP mean and how to achieve it.
5. How a functional safety study should be conducted.
6. How to draft a Safety Requirements Specification.
7. What is required of sub-contractors and suppliers involved in design, installation and commissioning of safety-related systems.
8. What is required to verify the SIL, CAT or PL achieved by a Safety Function.
9. How to perform a simple reliability analysis and determine the SIL achieved by a Safety Function.
10. What to do to ensure that the SIL, CAT or PL of a Safety Function is maintained through-life.

Workshop Presenter.

Marcus Punch, Director, Marcus Punch Pty. Ltd.



What previous workshop attendees have said about the presenter.

- Well Explained. Good workshop notes.
- Very good explanation of SIL's and Risk Reduction techniques. Very understandable.
- Examples and industry situations were used to clarify the ideas.
- Good overview of a complex subject. Demystified the subject. Simplified a complex subject.
- Covered what I need to know.
- Linked reliability to safety.
- I loved the story about Mr. Gorsky!

Workshop Materials.

Workshop materials, lunch and morning and afternoon tea will be provided to the participants. Workshop materials will include: workshop presentation slides / notes, an A3 safety lifecycle poster and a templates "kit".

Each attendee will also receive a complimentary copy of the presenter's book, "Functional Safety for the Mining and Machinery-based Industries – An Integrated Approach Using AS/IEC61508, AS/IEC61511, AS/IEC62061 ISO13849 and AS4024.1".

Workshop Locations, Dates and Timing.

9.30am – 5.00pm on the advised dates and locations.

Registration shall commence 9.15am for a 9.30am start.

Additional workshops in this and other locations may be scheduled subject to local demand.

Cost.

\$650.00 + GST for the 1st attendee from an organisation.
\$600.00 + GST for the 2nd and each successive attendee from the same organisation.

Contact for Information and Bookings.

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