

“Practical, reliable and efficient engineering solutions”

SAFETY OF MACHINERY

Foresight Engineering offers engineering consulting services in the field of Machinery Safety. Foresight personnel can apply their technical knowledge and experience to help facilitate an effective outcome for the owner or operator of plant and machinery. For sites with limited experience in machinery safety, Foresight can guide equipment owners through the review processes and help them establish a plan for the future.

For sites that have an established risk management plan, Foresight can provide additional technical resources to assist in achieving the objectives of their plan, with practical, compliant, cost effective and lasting solutions.

ON-SITE RISK ASSESSMENTS

Foresight Engineering can work with your key personnel to conduct on-site assessments of machinery risks to people and the environment. The typical steps of an assessment are:

- On-site inspection of equipment, access and egress and existing risk controls.
- Identification of risks, non-compliances or areas requiring further investigation.
- Assessment and grading of risks, typically involving close collaboration with Management, Maintenance, Operations and Environmental representatives.
- Prioritising of risks and remediation actions.
- Identification of solution options and indicative costing.
- Review of solutions with management, operation and maintenance personnel.
- Implementation of chosen solutions.

HIERARCHY OF RISK CONTROLS

Foresight Engineering endeavours to offer the most practical solutions to reduce the identified risks to acceptable levels in accordance with the *Hierarchy of Control*:

- Elimination of risk (e.g. removing equipment – rarely practicable).
- Substitution of risk (e.g. replacement of equipment - sometimes practicable).
- Engineering Controls (usually the most practical type of control), for example:
 - Design modifications to equipment.
 - Localised guarding of risk sources.
 - Fixed distance fences.
 - Electrical interlocking.
 - Fume or dust extraction systems.
 - Two handed controls and failsafe equipment.
 - Increased instrumentation and monitoring equipment.
- Administrative controls (often implemented in addition to the above):
 - Improved inspections or maintenance regimes.
 - New or updated work procedures.
- Personal Protective Equipment (e.g. faceguard, acid suit – usually only used in combination with controls above).