

Safety Machine safety services

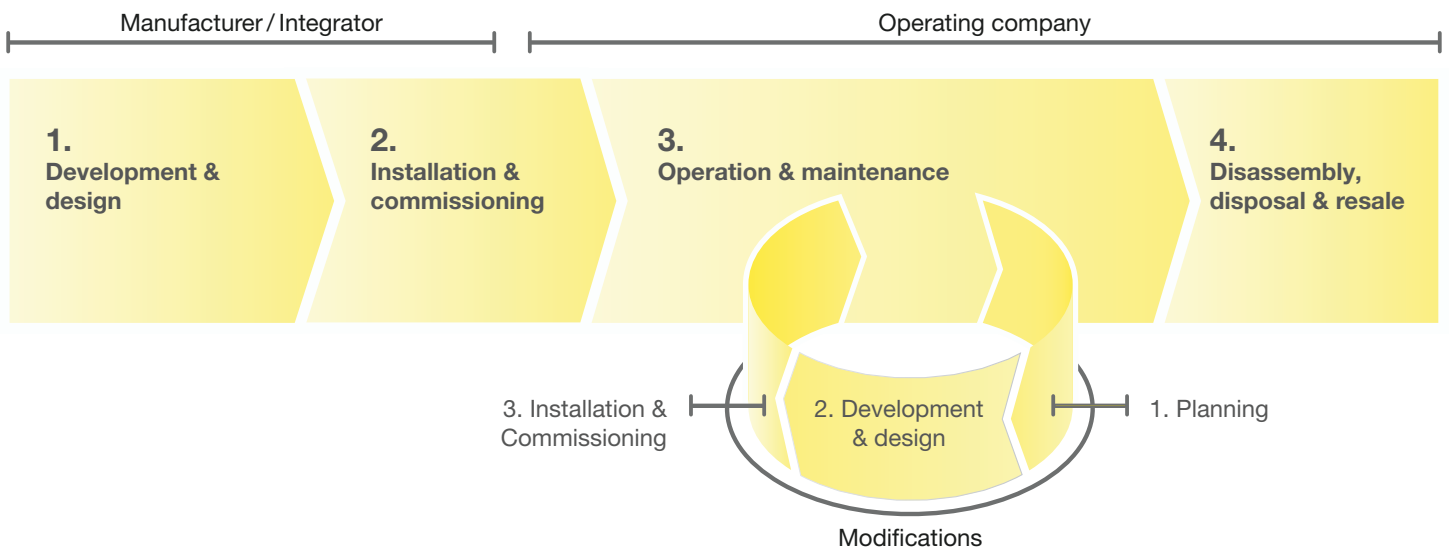
Safety at Leuze



Machine Safety Services

Sustainable machine safety begins with professional planning of the safety systems and spans the entire lifecycle of a machine. Our teams of experienced and certified experts offer the appropriate support here.

Stages of a machine life cycle



When designing and constructing machines, we create the safety-related concept together with you and support you in its realization. During operation, we perform regular testing to ensure the permanent function of the safety systems. If changes are made to existing machines, we provide you with support on everything from the safety-related planning to renewed commissioning.

Through our services, you benefit from our many years of experience in the area of machine safety and our extensive industry and application knowledge. Efficient safety-related solutions for every phase of a machine's life cycle are thereby created together.



Risk assessment

- Machine safety review

Review of the machine safety system and guarding. Report in form of a checklist showing compliance or non-compliance to current Australian/international standards.

- Team-based risk assessment

Risk assessment in collaboration with operation/maintenance team to identify all hazards, estimate risk and identify suitable risk reduction strategy. Comprehensive report detailing risk assessment outcome, current state, recommended risk reduction strategy and details of safety function to be executed by the safety related part of the control system.



Safety requirement specification (SRS)

- Documentation

Detailed specification of each safety function to be executed by the safety related part of the control system.



Safety circuit, design, analysis and verification

- Concept design of the safety related part of the control system.
- Verification of the design by review.
- Analysis and documentation report detailing the Performance Level (PL)/Safety Integrity Level (SIL) achieved by the safety circuit.
- Independent check of the achieved performance level (PL) by using the IFA tool SISTEMA.

Safety system validation

- Review of the safety system installation and functionality. The validation involves review, analysis and testing of the safety system to ensure that the safety system is installed and functions as per safety related specification document.

The validation includes:

- Development of validation plan as per the specifications.
- Competent examination of installed safety circuit for any errors.
- Comprehensible and well documented result of the safety system functionality, installation and behaviour under abnormal conditions.
- Checking of safety components for correct installation in accordance with the application.



Stop time measurement

- Measurements performed by experts with calibrated measurement devices provide a safe and sound basis for positioning the protective device.
- Comprehensible and well-documented test results in accordance with DIN ISO 9001:2015 and optional graphic analysis of the braking motion.
- Early detection of wear and tear in brake components with periodical inspections.



Safety training

Training on the safety processes and safety standards for managing machine safety.

Portfolio of “customised safety training” to cover functional safety standards and safety products aligned with your needs:-

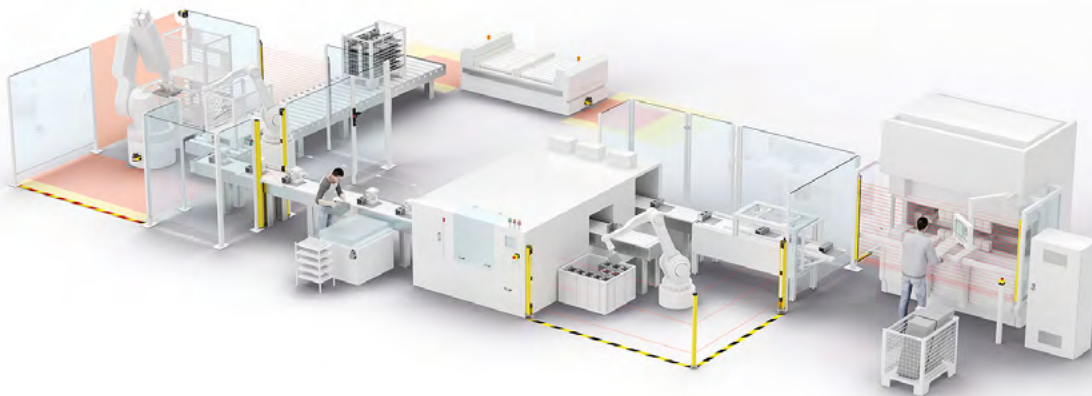
Examples:

1 day course:- Covers fundamental safety standards and safety design concepts.

2 day course:- Covers fundamental safety standards, design of the safety circuits, safety circuit verification. Example: using SISTEMA for evaluation of safety related parts of the control systems.

Training available:

- Inhouse
- Arranged venue
- At Leuze office on Melbourne



If you would like to arrange a visit from us, please fax or email the completed forms below:

| | Services | Description | Details | √ box |
|--|----------------------------------|---|--|-------|
| | Machine Safety Review | Review of the machine safety system and guarding. | Report in form of a checklist showing compliance or non-compliance to current Australian/International standards. | |
| | Team Based Risk Assessment | Risk assessment with operation/maintenance team to identify all hazards, estimate risk and identify suitable risk reduction strategy. | Comprehensive report - risk assessment outcome, current state, recommended risk reduction strategy and details of safety function by safety related part of the control system. | |
| | Safety Requirement Specification | Detailed specification of each safety function to be executed by the safety related part of the control system. | Specifications to include detailed functionality, operational interface requirements and integration to the machine control system. | |
| | Safety Design | Concept design. | Concept design of the safety related part of the control system to meet the safety requirement specification and verification of design using SISTEMA tool. | |
| | Safety Verification | Verification of the design. | Verification of the design by review and documented report detailing the performance level (PL) or safety integrity level (SIL) achieved by the safety related part of the control system. | |
| | Safety Circuit Analysis | Analysis and documented report of the safety system design. | A third party analysis of the safety circuit designed. A documented report details any non compliance with remediation strategy along with the Performance Level (PL)/ Safety Integrity Level (SIL) achieved by the safety circuit. | |
| | Safety System Validation | Review of the safety system installation and functionality. | The validation involves review, analysis and testing of the safety system to ensure that the safety system is installed as per safety related specification. | |
| | Stop Time Measurement | Measurements performed by experts with calibrated measurement devices. | Well documented test results in accordance with DIN ISO 900:2015 and optional graphic analysis of the machine stop time for installation of safety devices and early detection of wear and tear in brake components with periodic inspections. | |
| | Safety Training | Training on the safety processes and safety standards for managing machinery safety. | - Customised training on function safety standards, safety applications and safety products. Training available - at customer sites or at Leuze office. | |

Company: _____

Address: _____

Contact name: _____ Position held: _____

Contact number: _____ Email address: _____