Safety Services from SICK

Machine manufacturers and end-users must design their machines safely to ensure productive operations and the protection of people. From machine planning to modernization, Safety Services from SICK offer you high-quality services for precisely this purpose. They increase the safety of people, boost machine productivity and create a foundation for sustainable business.

Note: Please note the country-specific availability of the services.

Portfolio

Click here to see an overview of all machine safety services.

Consulting assistant

Click here to learn about the services that are right for you based on the machine life cycle.

CREATING
SAFE
PRODUCTIVITY

PORTFOLIO SAFETY SERVICES

Consult

Consulting and design

Support

Product and system support

Check

Verification and optimization

Retrofit

Modernization

Train

Training and education

Consulting and design

Services regarding evaluation, design, project planning and commissioning of safety solutions

Safety Services portfolio

Consulting and design

Product and system support

Verification and optimization

Modernization

Training and education

Consulting on machine safety

Manufacturing and operating safe machines requires comprehensive safety knowledge about directives, standards and suitable safety components.

- The SICK safety experts support you on individually selected topics within the extensive field of machine safety
- The safety experts provide information on relevant standards and guidelines and help you select and design protective devices

Virtual machine safety consulting

Machine safety consulting day

Consulting on collaborative robots

Consulting on automated guided vehicle systems

Safety Services portfolio

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Consulting on machine safety

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Risk assessment

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Safety hardware design

Safety software design

Validation of functional safety

Force and pressure measurement

Consulting on machine safety

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Virtual machine safety consulting

Overview Range of services Notes

With the virtual machine safety consulting service, the SICK safety experts support you digitally on individually selected topics within the extensive field of machine safety.

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Machine safety consulting day

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Virtual machine safety consulting

Overview Range of services Notes

Possible topics

- Individual online consulting on customized topics of machine safety
- CE marking process according to the European Machinery Directive
- Risk assessment, safety concepts
- Selection and dimensioning of safety concepts
- Requirements for machine operators: necessary adaptations to the technology, inspections of protective devices
- Selection and dimensioning of protective devices
- Identifying and preventing manipulations as well as reducing incentives to manipulation

Safety Services portfolio

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Virtual machine safety consulting

Overview Range of services Notes

Prerequisites

- Clarification of relevant topics in advance

Please note

- The duration of the online consultation is about 2 hours

Documentation

- Summary of the virtual consultation with additional information

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Machine safety consulting day

Overview Range of services Notes

On the machine safety consulting day, SICK safety experts will be available on site to advise you on individually selected topics from the extensive field of machine safety.

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Overview Range of services Notes

Possible topics

- Individualized consulting on machine safety topics agreed with you in advance
- CE marking process according to the European Machinery Directive
- Risk assessment, safety concepts
- Selection and dimensioning of safety concepts
- Requirements for machine operators: necessary adaptations to the technology, inspections of protective devices
- Selection and dimensioning of protective devices
- Identifying and impeding manipulations as well as reducing incentives to manipulation

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Overview Range of services Notes

Prerequisites

- Clarification of relevant topics in advance

Please note

- Consultation takes place on site (machine-specific on request)

Documentation

- Summary of the consultation with additional information

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Consulting on collaborative robots

Overview Range of services Notes

Collaborative robots are increasingly being used to increase the precision of tasks and to support employees in their work. However, this type of collaboration between humans and robots poses new challenges with regard to protecting workplaces.

– SICK safety experts consult you on the opportunities and challenges associated with the efficient protection of collaborative robots

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Consulting on collaborative robots

Overview Range of services Notes

Possible topics

- Conveying the fundamentals of collaborative robots
- Types of human/robot interaction
- Normative background to TS 15066
- Methods of protection for collaborative robots
- Opportunities and limits of the performance of collaborative robots
- Example measurement of force and pressure on collaborative robots
- Discussion of concrete application ideas and assessment of viability
- Feasibility of protection measures

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Consulting on collaborative robots

Overview Range of services Notes

Prerequisites

- Descriptions and sketches of the planned application

Please note

- No risk assessment of the robot application is carried out
- No specific safety functions are defined
- No validation is performed in the form of a force and pressure measurement

Documentation

- Summary of the consultation with additional information on the topic of collaborative robots

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Automated guided vehicle systems consulting day

Overview Range of services Notes

Automated guided vehicle systems make an important contribution to automation in production and logistics. In areas where humans and automated guided vehicle systems share a workspace, safety is crucial, in addition to high productivity.

– SICK safety experts consult you on the opportunities and challenges associated with the efficient protection of automated guided vehicle systems

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Consulting on automated guided vehicle systems

Automated guided vehicle systems consulting day

Overview Range of services Notes

Possible topics

- The basics of automated guided vehicle systems
- Use of automated guided vehicle systems in the working environment
- Normative background to ISO 3691-4 and EN 1175
- Protection methods for automated guided vehicle systems
- Application of safety laser scanners and design of protective fields depending on speed and direction
- Drive systems and requirements for safety-relevant parts of the controller

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Automated guided vehicle systems consulting day

Overview Range of services Notes

Prerequisites

- Descriptions and sketches of the automated guided vehicle system and where it is used

Please note

- No risk assessment of the automated guided vehicle system or where it is used is carried out
- No specific safety functions are defined
- No validation of safety functions is performed

Documentation

- Summary of the consultation with additional information on the topic of automated guided vehicle systems

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Overview Range of services Notes

Safety experts from SICK create a comprehensive overview of the machines in question for you and assess their safety-related condition based on defined criteria.

- For efficient planning of modernization measures, you receive a meaningful overview of the safety-related condition of your machines
- You benefit from standardized procedures for prioritizing safety-related modernization measures at the machine level for validations of consistently high quality
- You will receive support in estimating budgets for safety-related retrofitting measures

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Overview Range of services Notes

Possible topics

- Evaluation of the existing machinery (plant, hall, area)
- Safety-related evaluation of the relevant machines based on clearly defined criteria
- Summary of the biggest safety deficits on individual machines
- Suggestions for recommended immediate measures (if required)
- Prioritization of safety-related modernization measures at machine level
- Assistance with estimating the budget for safety-related retrofitting measures

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Overview Range of services Notes

Prerequisites

- Mutually agreed list of machines to be evaluated
- Free access to the relevant machines

Please note

- Evaluation and classification do not result in a complete risk assessment
- Existing risk reduction measures and safety devices are not checked for correct functionality or conformity to standards
- The derived prioritizations are recommendations only. Responsibility for implementation lies with the machine operator

Documentation

- Brief report with an overview of the evaluated machines
- Overview of prioritization of machines for which safety-related improvements were recommended

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Learn more at sick.com

Overview | Range of services | Notes | Documentation examples

The machine safeguarding evaluation offers an overview of the current safety status of the machine and helps to determine the protective measures necessary for complying with legal requirements.

- You get an overview of the safety status of the machine through
- the identification of hazards as part of a risk assessment
- You benefit from an economical, carefully considered recommendation on new protective measures or how to improve existing protective measures
- Taking the recommended protective measures for safety technology is simple and ensures compliance with standards
- You can rely on assured quality through internationally standardized processes and sustainable competency management

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Overview | Range of services | Notes | Documentation examples

- Identification and naming of identifiable electrical and mechanical hazards
- Risk estimation of all identified hazards
- Designation of existing technical protection measures
- Designation of unprotected hazardous areas
- Estimation of the PLr for existing and recommended safety control measures
- Functional test of the existing protective devices (device test by triggering the safety function)
- Identification and naming of identifiable manipulated protective devices
- Graphic representation of the measures in the machine layout
- Integration of all known operating modes
- List of applicable standards and regulations
- Audited report of the work results
- Recommendation of protective measures for non-protected hazardous areas
- Recommendation for the improvement of existing protective measures
- Recommendation for action with budget estimation

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Overview | Range of services | Notes | Documentation examples

Prerequisites

- SICK requires permission to take photos of the machine and to evaluate them for the safeguarding evaluation
- Machine ready for operation and personnel familiar with the machine
- Machine layout and description of operation, e.g. operating instructions

Please note

- SICK ensures that all information contained (text and photos) is used exclusively in the framework of the machine safeguarding evaluation and not for any other purpose. Data protection is ensured
- Evaluation of other types of hazards on request

Documentation

- Audited report of the work results with reference to applicable standards and regulations including final results

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Mechanical hazards

Moving elements

Source	Consequence
Robot	Crushing

The moving robot can hit a person which is present in the working area. Upper limbs of the person could be crushed between the robot arm and parts of the frame.

Loading

Operator is charging the material storage unit. Task is executed 5 times per day (8 hour shift). Task takes 10 minutes to execute	**Affected persons**
	Operator

Severity [S]	Exposure [E]	Avoidance [A]	Occurrence [O]	Risk IN
S3	E3	A2	O3	6

Risk reduction					S	F	A	O	Risk OUT
Inherent design			D005	Mechanical movement limiting	S3	E3	A2	O3	6
Engineering	Guards		G001	Perimeter guard	S3	E3	A2	O3	6
			G002	Door loading station					
	Devices		T101	Interlock door loading station	S3	E0	A2	O3	1
			T911	Emergency stop loading station					
Administrative			T102	Guard locking door loading	S3	E0	A2	O3	<1
			A002	Operator training					
Residual risk	Access to the hazard and unexpected start is prevented by the protective devices.								

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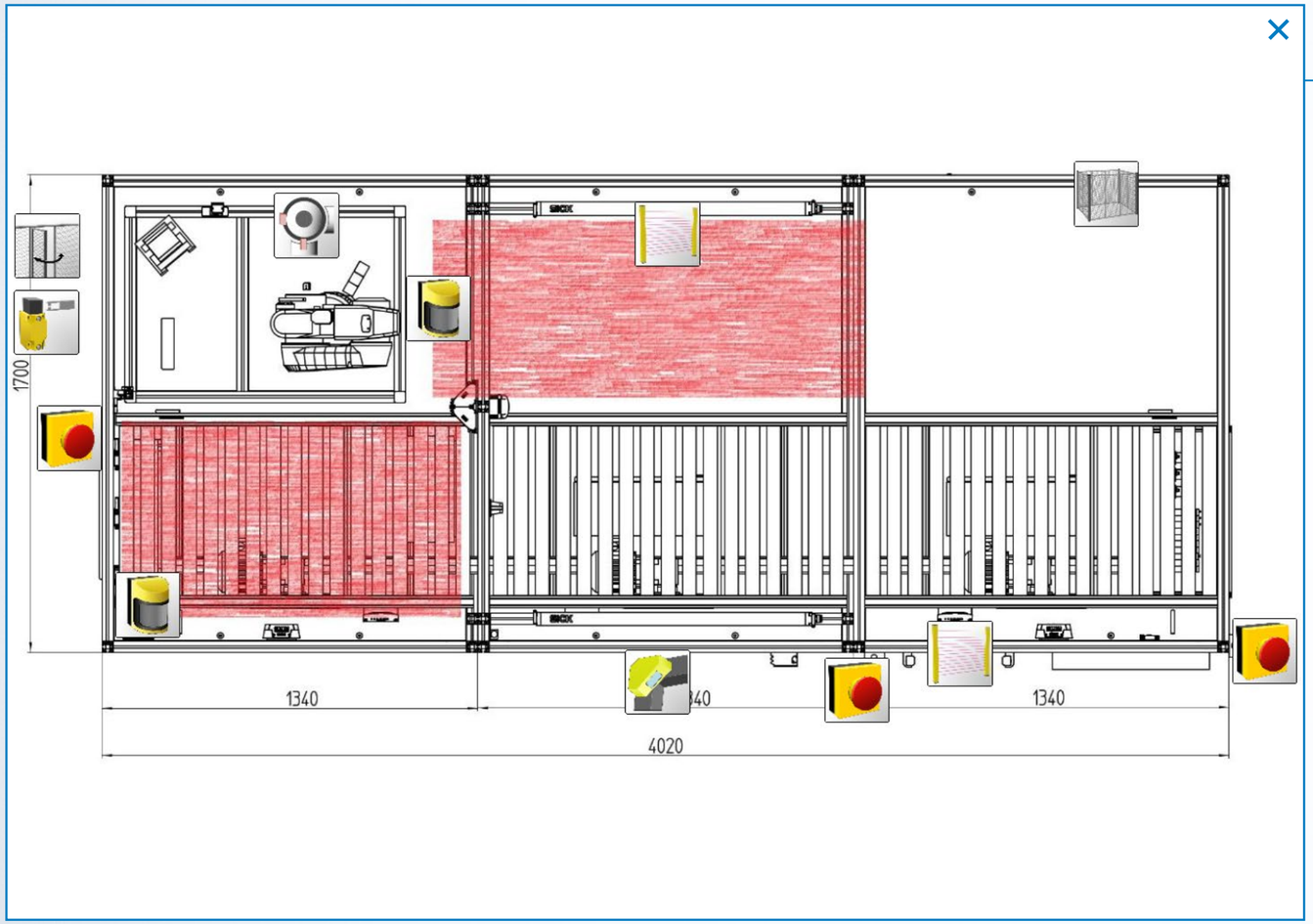

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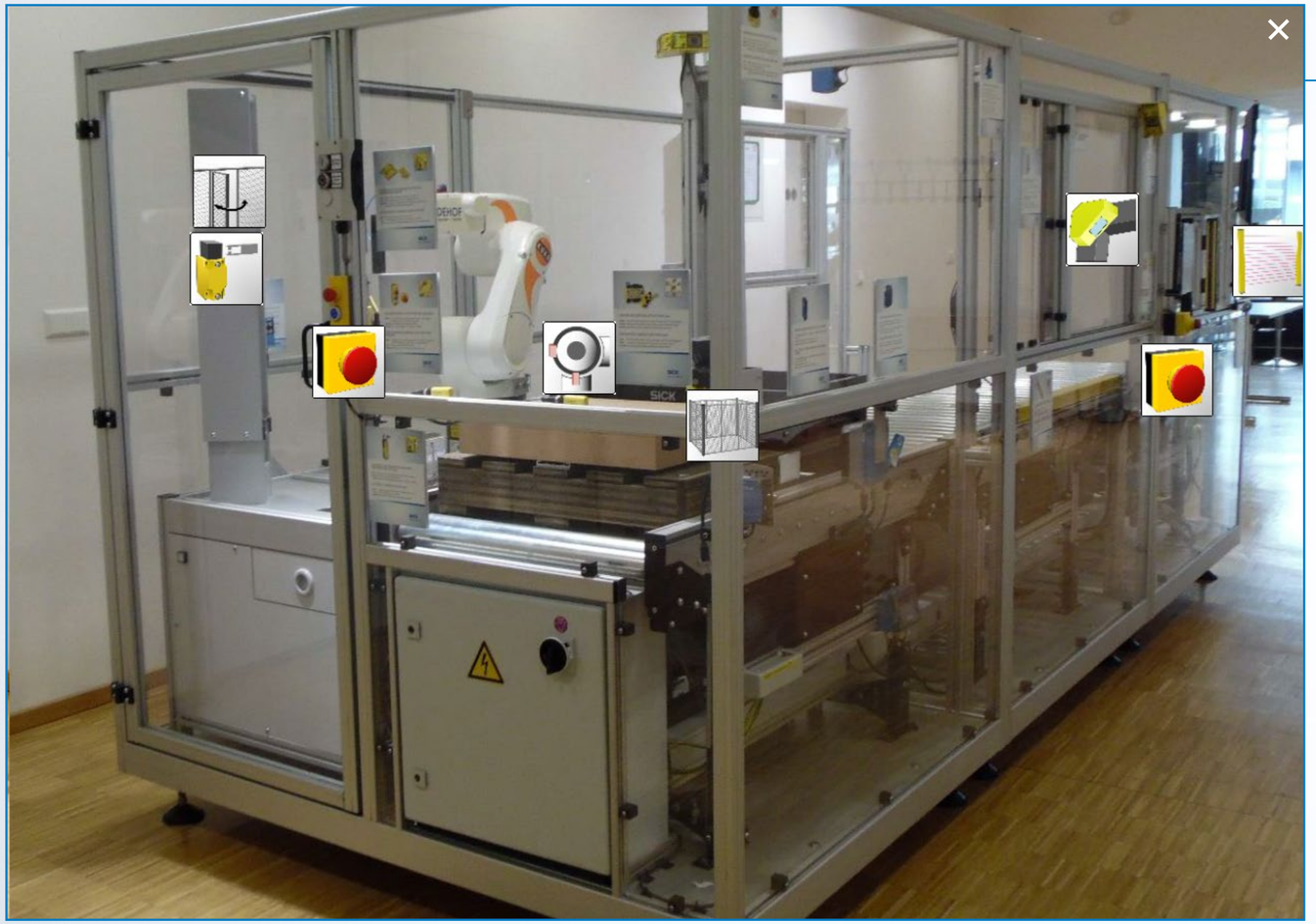

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Learn more at sick.com

Overview | Range of services | Notes | Documentation examples

Based on a targeted assessment of the hazards, the SICK risk assessment provides you with a proposed solution for appropriate risk reduction measures.

- Improve the safety and productivity of your machines and systems thanks to individualized coordination with SICK safety experts
- You benefit from standardized procedures and defined processes that ensure efficient risk assessments of the same quality worldwide
- Rely on the many years of experience of SICK safety experts and save valuable time and resources so you can focus on your core business

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Overview | Range of services | Notes | Documentation examples

- Draft of the risk assessment using the valid directives and standards relevant for the machine
- Review of design documents or recording of machine data on-site, if required
- Recording and documentation of the machine limits, machine functions and activities on the machine as well as the intended use and foreseeable misuse
- Identification of mechanical and electrical hazards and associated hazardous situations
- Assessment and evaluation of the risk for each identified hazard and hazard situation
- Recommendation of risk reduction measures according to the 3-step method (design measures, technical protective measures, information for use)
  - Definition of required performance level (PLr) for safety functions together with the manufacturer
- Assessment of the possible residual risk, taking into account the recommended risk reduction measures

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Overview | Range of services | Notes | Documentation examples

Prerequisites

- Machine manufacturer provides design documentation and description of the machine and its functions
- Design staff of the machine manufacturer is available to provide information on the phone or in person

Please note

- Proof of correct mechanical design and any necessary static calculations must be documented separately by the machine manufacturer
- Mechanical and electrical hazards are covered. Other types of hazards (radiation, temperature, etc.) can only be considered in detail after individual clarification
- Activities in the machine life phases that relate to machine operation are taken into account. Life cycle phases of commissioning and decommissioning are not taken into account

Documentation

- Provision of the generated documentation in PDF format
- Other formats or tools are available on request

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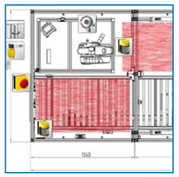

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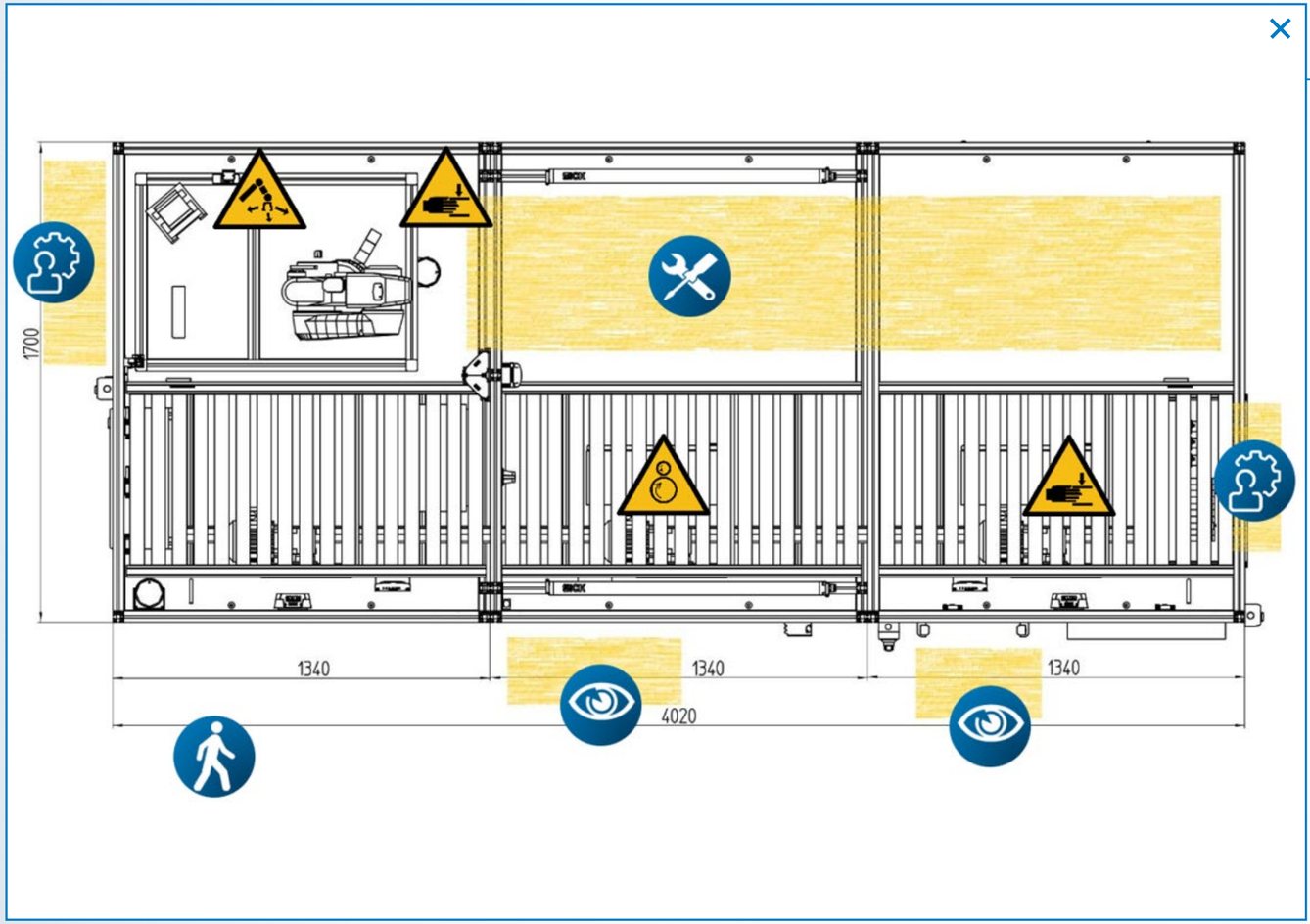

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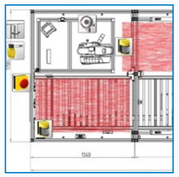

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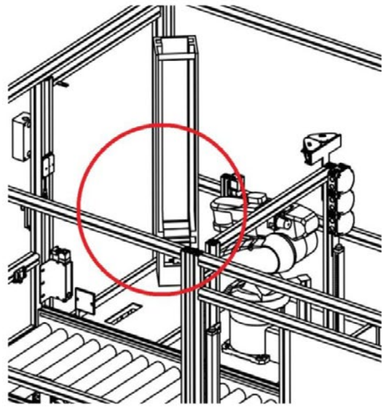

Loading

Operator is charging the material storage unit.
Task is executed 5 times per day (8 hour shift).
Task takes 10 minutes to execute

Affected persons
Operator

Severity [S]	Exposure [E]	Avoidance [A]	Occurrence [O]	Risk IN
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		A002	Operator training					
Residual risk		Access to the hazard and unexpected start is prevented by the protective devices.						

Documentation examples

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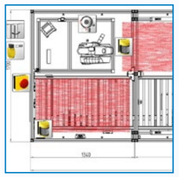

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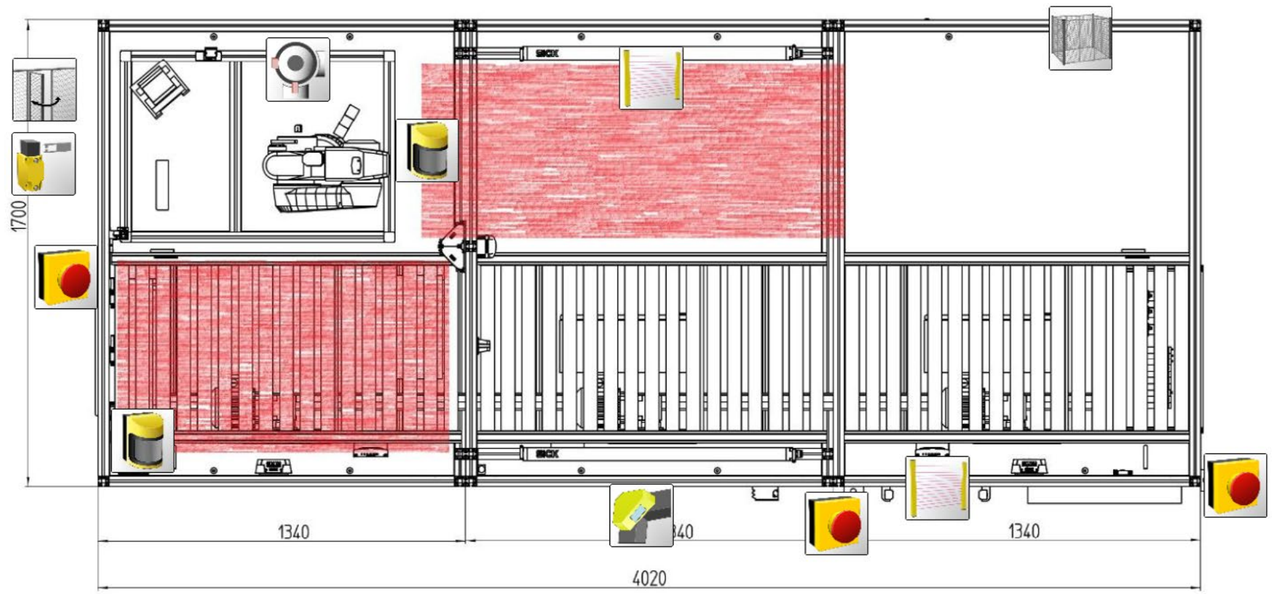

Documentation examples

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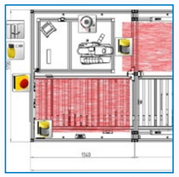

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Overview | Range of services | Notes | Documentation examples

The safety concept from SICK provides you with an individualized and product-neutral proposal for creating a safe and productive machine.

- You receive a clear visualization of the solution including representation of the measures and components on the machine
- You receive standard-compliant planning of physical guards, safety functions and additional protective functions
- You benefit from assured quality thanks to internationally standardized procedures and processes as well as sustainable competency management

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Overview | Range of services | Notes | Documentation examples

- Creation of a safety concept with a proposed solution for the design of compliant risk reduction measures
- The safety concept is carried out on the basis of a risk assessment or machine safeguarding evaluation
- Clear and easily understandable visualization of the solution including representation of the measures and components on the machine
- Design and positioning of physical guards and non-separating guards with reference to relevant standards
- Design and positioning of safety functions with reference to relevant standards
- Design and positioning of additional protective measures, such as emergency stop with reference to relevant standards
- Consideration of machine-specific standards in the design of risk reduction measures

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Prerequisites

- The draft of a safety concept is only possible on the basis of a risk assessment, hazard assessment or machine safeguarding evaluation
- Special requirements must be communicated and provided by the client prior to offer acceptance, e.g., factory standards, operating equipment specifications, performance level specifications

Please note

- The range of services depends on the individualized project coordination and the agreement in the functional specifications
- Reference to relevant standards for implementing the recommended risk reduction measures
- If type C standards are relevant for the machine, these apply accordingly

Documentation

- Provision of the generated documentation in PDF format
- Coordination and presentation of the proposed safety solution for planning of further processes

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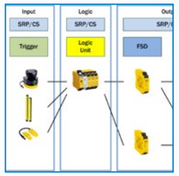
Shutdown matrix of the safety functions with sensors and actuators

Design of the safety functions



Overview of the machines of the safety solution

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Interaction matrix

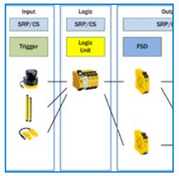
		Hazard sources		
Actuator	Machine area	Robot area		Conveyor
	Hazard source	Robot	Gripper	Conveyor 1/2/3
	Technology	electric	pneumatic	electro mechanic
	Minimum distance	n/a	n/a	n/a
	Required stopping performance	<500ms	<500ms	<500ms
Output	Safe state	STO	exhaust	power off
	n_{op} total	3540	3540	4525
	MPCE	VFD	valve	contactor
	FSD	UE10		XTIO

Trigger (Input)										Logic	Control Zones		
SF	Device	ID	Location	Remarks	Event	n_{op} [n/year]	Reaction	Reset: Man	Reset: Auto	Operating mode: Manual		Robot area	Conveyor area
Hazard area protection with ESPE													
SF11	AOPDDR	T330	maintenance area inside	horizontal alignment scan range max 5m Max. scan plane height of 300 mm 50 mm resolution	infringe AOPD	365	prevent unexpected start		x	x		PLr d	PLr c	PLc
Hazard area protection with ESPE													
SF11	AOPDDR	T340	maintenance area inside	horizontal alignment scan range max 5m Max. scan plane height of 300 mm 50 mm resolution	infringe AOPD	365	prevent unexpected start		x	x		PLr d	PLr c	PLc
Safeguarding access for interventions with guard locking													
SF10	Interlock device	T321	loading door		open a door	2080	initiate stop	x		x		PLr d	PLr c	
Stopping in emergency situations													
SF99	Estop push button	T110 T210 I310	loading door quality check 1/2 end of line		push the button	365	Initiate emergency stop	x		x		PLr d	PLr c	PLr c

Documentation examples

Shutdown matrix of the safety functions with sensors and actuators

Design of the safety functions



Overview of the machines of the safety solution

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Safety software design

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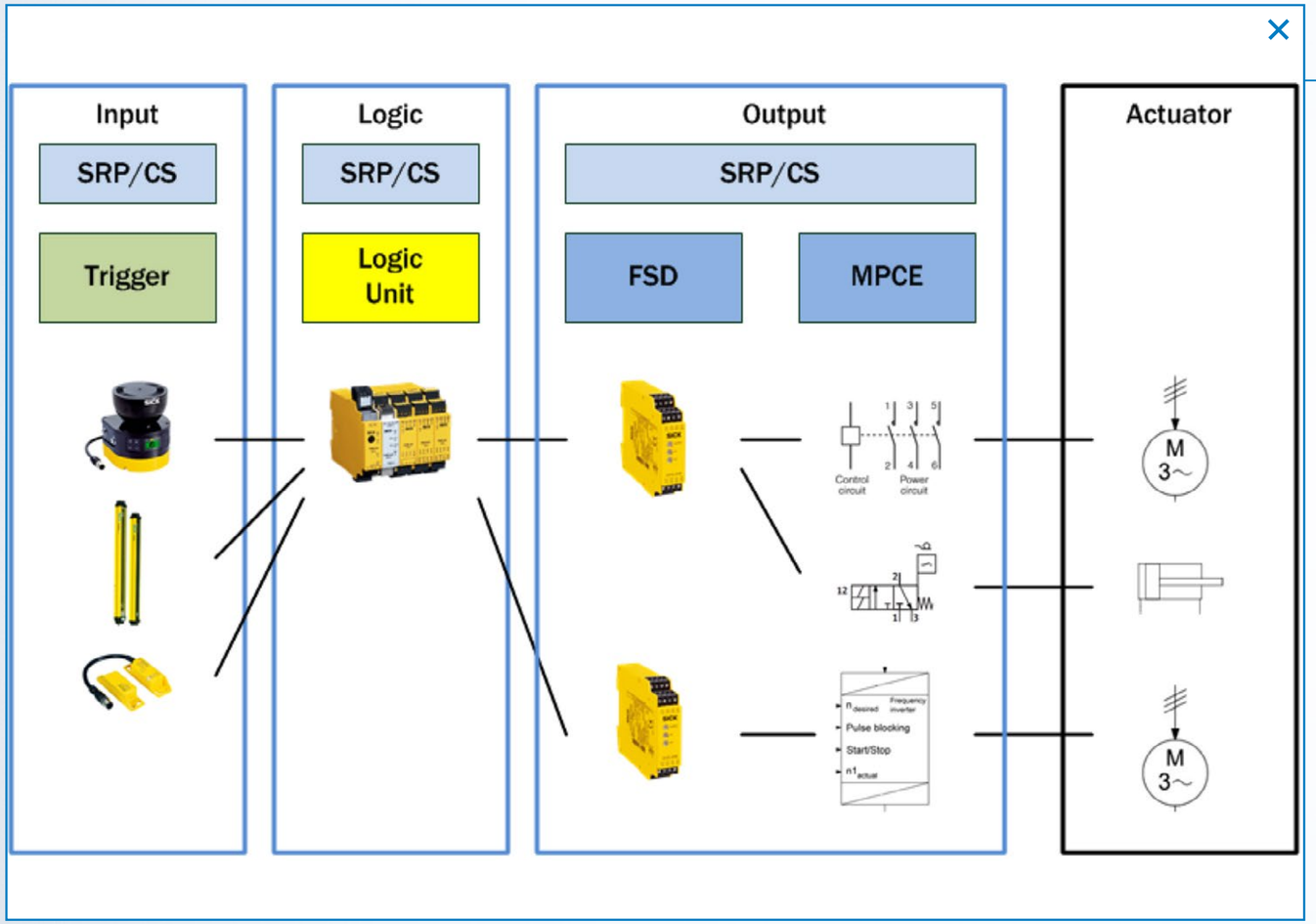
Force and pressure measurement

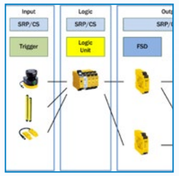
Safety concept



Documentation examples

Shutdown matrix of the safety functions with sensors and actuators

Design of the safety functions



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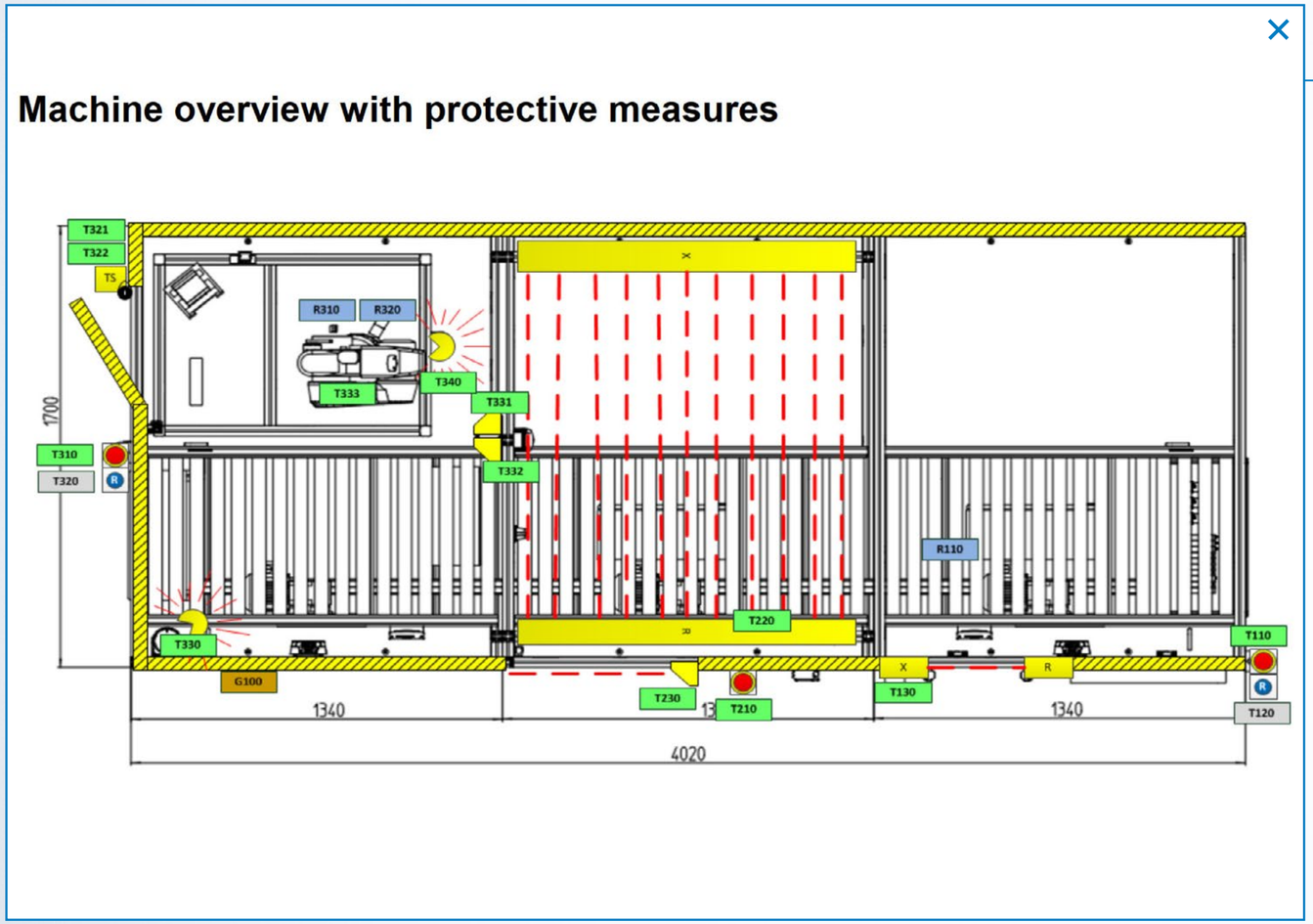
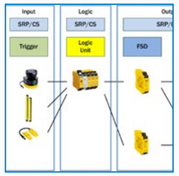


Documentation examples

Shutdown matrix of the safety functions with sensors and actuators

Design of the safety functions



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Learn more at sick.com

Overview Range of services Notes

The safety hardware design from SICK provides you with detailed specifications for the efficient design of safety solutions.

- You receive technical documentation, thus fulfilling the normative requirements
- You benefit from standardized procedures that ensure efficient hardware designs of the same quality worldwide
- You receive a safety solution individually tailored to your work processes with the aim of increasing the productivity of your machine
- Rely on the many years of experience of SICK safety experts and save valuable time so you can focus on your core business

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Overview Range of services Notes

- Creation of the specifications of the safety-related parts of controllers (SRP/CS) taking into account the required performance level (PLr) in accordance with ISO 13849
- Digitalization and update of the OEM circuit diagram in relation to the modified SRP/CS
- Creation of the parts list for the new SRP/CS
- Specifications of measures for controlling and avoiding systematic errors
- Calculation of the achieved performance level (PL) of the SRP/CS according to ISO 13849
- Dimensioning of physical guards
- Calculation of required safety distances and stopping times

Learn more at sick.com

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Overview Range of services Notes

Prerequisites

- The draft is based on a risk assessment and a safety concept
- Circuit diagrams of the machine manufacturer (electrical, pneumatic, hydraulic)
- Design documentation of the machine manufacturer
- Special requirements must be communicated and provided by the client prior to offer acceptance, e.g., factory standards, operating equipment specifications, performance level specifications

Please note

- The range of services depends on the individualized project coordination and the agreement in the functional specifications
- If type C standards are relevant for the machine, these apply accordingly
- Reference to relevant standards for implementing the recommended risk reduction measures

Documentation

- Provision of the generated documentation in PDF format
- Coordination and presentation of the created technical documentation as well as planning of further processes

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Overview Range of services Notes

The safety software design from SICK provides you with detailed specifications for the efficient design of safety-related application software (SRASW).

- You receive safe and reliable programming of the safety controller and meet the normative requirements
- You benefit from standardized procedures and defined processes that ensure efficient software designs of the same quality worldwide
- Rely on the many years of experience of SICK safety experts and save valuable time and resources so you can focus on your core business

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Overview Range of services Notes

- Creation of the specifications of the safety-related application software (SRASW) using the V-model and taking into account the requirements of ISO 13849
- Creation of the parameter specifications for configurable and parameterizable safety devices
- Programming and parameterization of the safety-related application software based on the specifications for safety controllers from SICK
- Code review of the safety program

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Overview Range of services Notes

Prerequisites

- The draft is based on a risk assessment and a safety concept
- Circuit diagrams of the machine manufacturer (electrical, pneumatic, hydraulic)
- Special requirements must be communicated and provided by the client prior to offer acceptance, e.g., factory standards, operating equipment specifications, performance level specifications

Please note

- Creation of software for other safety controllers possible upon agreement

Documentation

- Provision of the generated documentation in PDF format
- Provision of the safety program

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Overview | Range of services | Notes | Documentation examples

Validation of functional safety by SICK provides you with detailed and reliable verification of the safety solution.

- You receive traceable documentation of the tests and corrections performed on the machine, thus fulfilling the normative requirements
- You benefit from standardized procedures and defined processes that ensure efficient validations of the same quality worldwide
- Rely on the many years of experience of SICK safety experts and save valuable time and resources so you can focus on your core business

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Overview Range of services Notes Documentation examples

- Creation of the verification and validation plan
- Definition of test points for physical guards
- Definition of the test points for the input/output check
- Definition of the test points for testing the device configuration
- Definition of the function tests
- Verification of the installed physical guards
- Verification of the installed SRP/CS
- Validation (function tests)
- Logging of results with recommendations for possible corrections

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Overview | Range of services | Notes | Documentation examples

Prerequisites

- The draft of the test plan is based on the detailed specifications of the functional safety
- Circuit diagrams of the machine manufacturer (electrical, pneumatic, hydraulic)
- The program of the safety-related application software is available
- To perform the test, the machine must be ready for operation and all SRP/CS must be installed and functional

Please note

- The range of services depends on the individualized project coordination and the agreement in the functional specifications

Documentation

- Provision of the verification and validation protocol in PDF format

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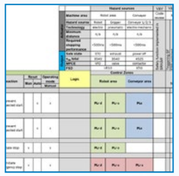
Interaction matrix

		Hazard sources			V&V	V&V Function test							
	Machine area	Robot area		Conveyor	Code review	Mode Manual							
Actuator	Hazard source	Robot	Gripper	Conveyor 1/2/3	Safety function implemented in SRASW	Triggering SF	FSD switched	MPCE switched	Safe state reached	No restart with triggered SF	Manual reset working		
	Technology	electric	pneumatic	electro-mechanic									
	Minimum distance	n/a	n/a	n/a									
	Required stopping performance	<500ms	<500ms	<500ms									
Output	Safe state	STO	exhaust	power off									
	n_{op} total	3540	3540	4525									
	MPCE	VFD	valve	contactor									
	FSD	UE10		XTIO									

Trigger (Input)											Logic	Control Zones									
SF	Device	ID	Location	Remarks	Event	n_{op} [n/year]	Reaction	Reset		Operating mode		Robot area		Conveyor area		PASS [P] FAIL [F] Not testable [O]						
								Man	Auto	Manual												
Hazard area protection with ESPE																						
SF11	AOPDDR	T330	maintenance area inside	horizontal alignment scan range max 5m Max. scan plane height of 300 mm 50 mm resolution	infringe AOPD	365	prevent unexpected start		x	x		PLr d		PLr c		PLc						
Hazard area protection with ESPE																						
SF11	AOPDDR	T340	maintenance area inside	horizontal alignment scan range max 5m Max. scan plane height of 300 mm 50 mm resolution	infringe AOPD	365	prevent unexpected start		x	x		PLr d		PLr c		PLc						
Safeguarding access for interventions with guard locking																						
SF10	Interlock device	T321	loading door		open a door	2080	initiate stop	x		x		PLr d		PLr c								
Stopping in emergency situations																						
SF99	Estop push button	T110 T210 T310	loading door quality check 1/2 end of line		push the button	365	Initiate emergency stop	x		x		PLr d		PLr c		PLr c						

Documentation examples

Shutdown matrix of the safety functions infunction test



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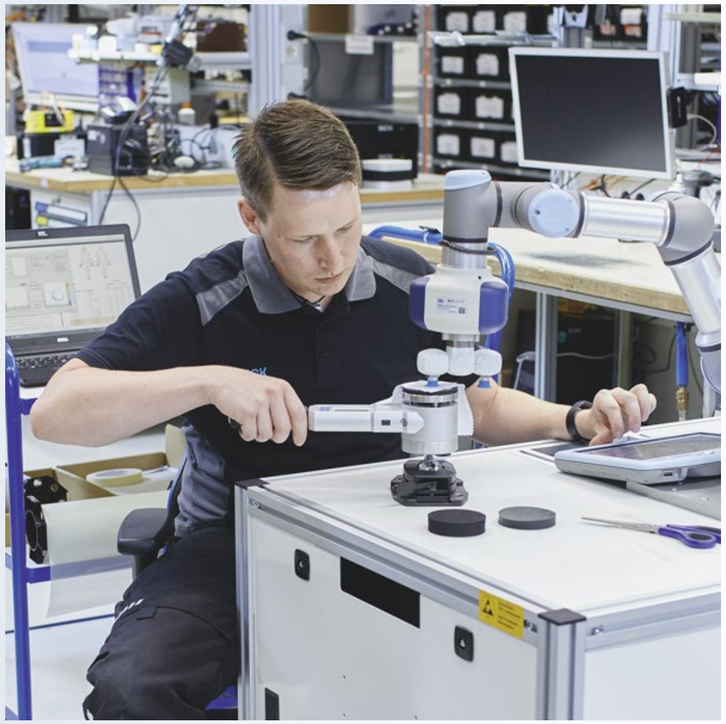

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Overview Notes

Force and pressure measurement by SICK provides valuable data to reduce the risk of your robot application.

- You receive complete, easily understandable documentation that complies with the requirements of ISO/TS 15066, including an overview of limit values that have been complied with and exceeded
- Defined processes and a structured process for quick and reliable measurement give you more time to concentrate on your core business
- You profit from the decades of experience of SICK in machine safety and get a safeguarding solution which ensures high productivity

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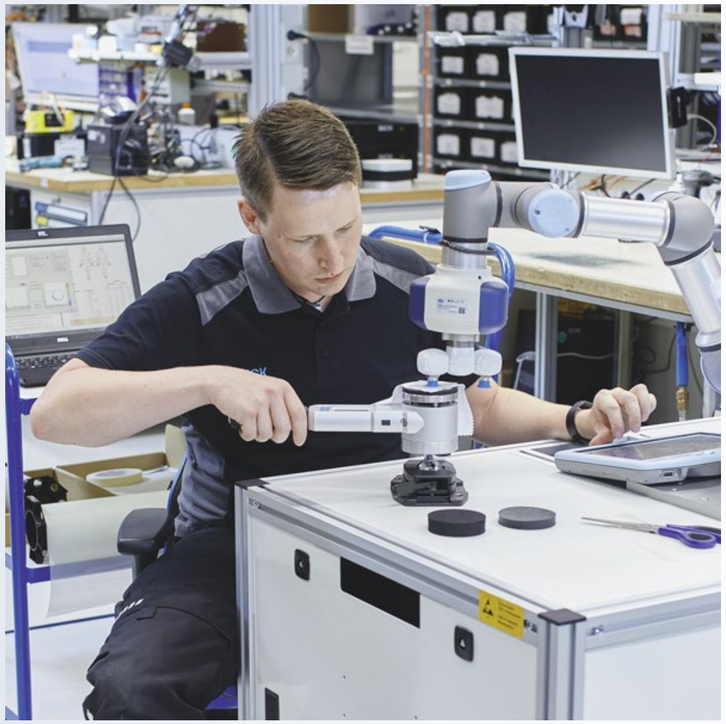

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Overview Notes

Prerequisites

To perform the service, SICK needs:

- The defined contact points from your risk assessment at which force and pressure are to be measured. Contact points include all locations (quasi-static and transient) where a robot manipulator, end effector, workpiece, or other objects within the robot workspace can contact a human during automatic operation
- Description of the application and the intended movement of the robot system
- Structure of the robot system
- For the duration of the measurement, the applications and the robots are not available for production
- Specialists for operation of the robot must be available

Documentation

- A report with all results of the measurements. This contains references and limit values for the different body regions (ISO/TS 15066) and can be used as part of the robot system documentation

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Product and system support

Product and system support by phone, remote access or directly at your site

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Modernization

Training and education

Verification and optimization

Inspection of safety-related equipment for reliable machine safety

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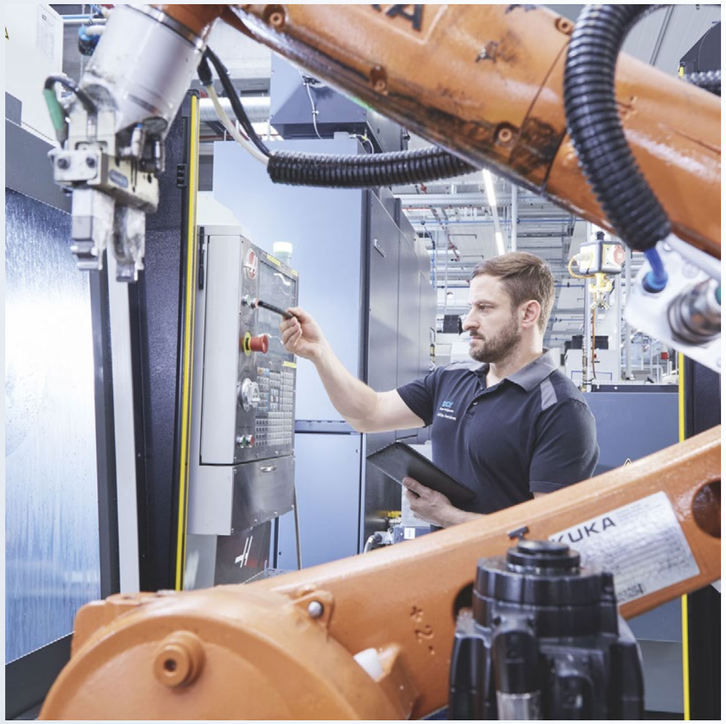
Product and system support

Verification and optimization

Modernization

Training and education

Inspection of protective devices



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Overview

Initial inspection of the protective devices before the machine is put into operation for the first time verifies the proper mounting and correct functioning of the protective devices and documents this. Periodic inspections serve to check the effectiveness of the protective devices based on the current use of the machine. This means changes or manipulations can be detected and corrected in time.

Service contracts Accreditation

Initial inspection:

Safety light curtain

Safety laser scanner

Periodic inspection:

Safety light curtain

Safety light curtain with maintenance

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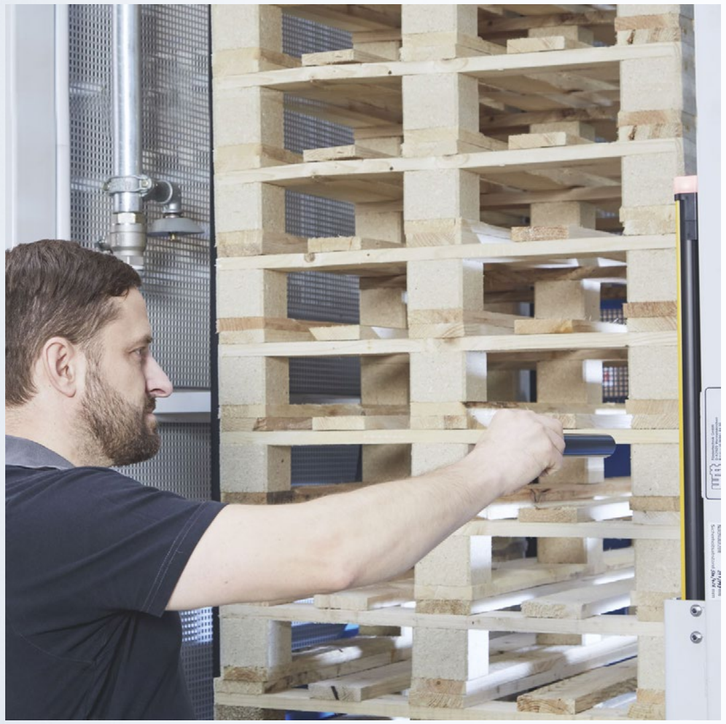
Stop time measurement

Accident investigation

Initial inspection of a safety light curtain



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Overview Range of services Notes

Initial inspection of the opto-electronic protective devices before the machine is put into operation for the first time verifies the proper mounting and correct functioning of the protective devices for the detection of persons and documents this in accordance with the obligation to provide evidence.

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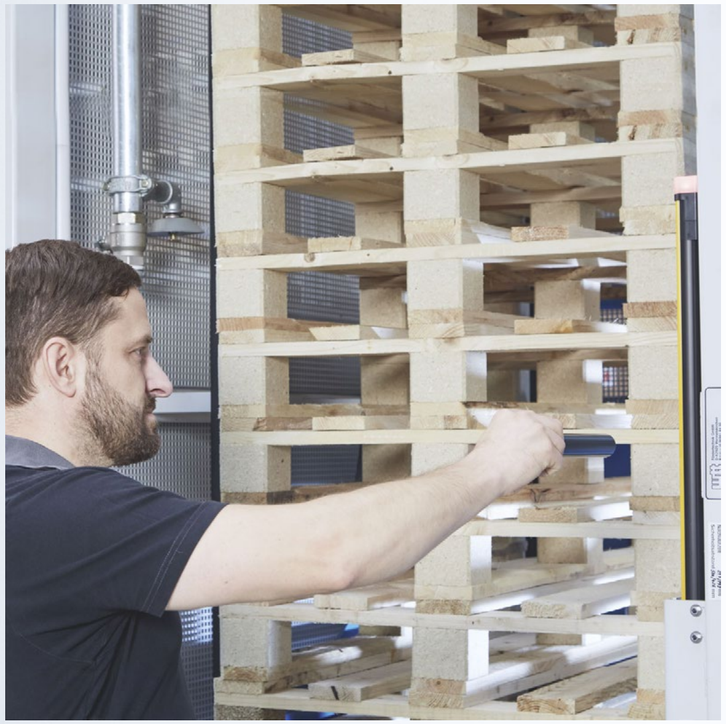

Learn more at sick.com

Overview Range of services Notes

- Testing of suitability of opto-electronic protective device for protecting the hazardous point
- Testing of installation, mounting and condition of opto-electronic protective device
- Testing of function and mode of operation of opto-electronic protective device
- Identification of safety-critical deficiencies, modifications and manipulations as well as troubleshooting options
- Readjustment of the opto-electronic protective device

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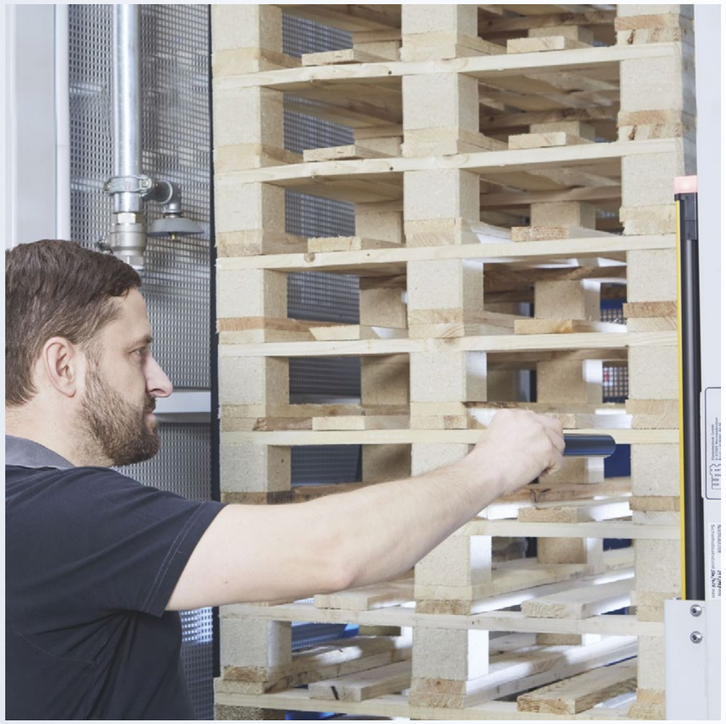
Initial inspection of a safety light curtain



Learn more at sick.com

Overview Range of services Notes

Prerequisites

- Protective device is mounted, ready for operation and accessible
- Machine documentation is available
- Operators are available for the time of the inspection to make adjustments to the machine and to start the machine

Please note

- To determine the minimum distance for the protective device, specification of the machine stopping time is required. If this information is not available in writing, the stopping time can be measured via the SICK Service stop time measurement

Documentation

- Detailed inspection report on the processed test points and the test results
- Award of a SICK test seal after successful inspection

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Learn more at sick.com

Overview Range of services Notes

Initial inspection of the opto-electronic protective devices before the machine is put into operation for the first time verifies the proper mounting and correct functioning of the protective devices for the detection of persons and documents this in accordance with the obligation to provide evidence.

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Overview Range of services Notes

- Testing of suitability of opto-electronic protective device for protecting the hazardous point
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- Identification of safety-critical deficiencies and troubleshooting options

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Learn more at sick.com

Overview Range of services Notes

During periodic inspections, the effectiveness of the protective devices is checked and documented. This is done taking into account the current use of the machine within the legally required inspection intervals.

- Changes or manipulations can be detected and corrected in time
- If necessary, the protective device is readjusted

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Overview Range of services Notes

- Testing of suitability of opto-electronic protective device for protecting the hazardous point according to the current use of the machine
- Testing of installation, mounting and condition of opto-electronic protective device
- Testing of function and mode of operation of opto-electronic protective device
- Identification of safety-critical deficiencies, modifications and manipulations as well as troubleshooting options
- Readjustment of the opto-electronic protective device and elimination of contamination (if required)

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Overview Range of services Notes

Prerequisites

- Protective device is mounted, ready for operation and accessible
- Machine documentation is available
- Machine operators are available for the time of the inspection to make adjustments to the machine and to start the machine

Please note

- To determine the minimum distance for the protective device, specification of the machine stopping time is required. If this information is not available in writing, the stopping time can be measured via the SICK Service stop time measurement

Documentation

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- Award of a SICK test seal after successful inspection

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Learn more at sick.com

Overview Range of services Notes

During periodic inspections, the effectiveness of the protective devices is checked and documented. This is done taking into account the current use of the machine within the legally required inspection intervals.

- Especially for older SICK safety light curtains with wear (LVU, LVS ...)
- Changes or manipulations can be detected and corrected in time
- If necessary, the protective device is readjusted

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Overview Range of services Notes

- Testing of suitability of opto-electronic protective device for protecting the hazardous point according to the current use of the machine
- Testing of installation, mounting and condition of opto-electronic protective device
- Testing of function and mode of operation of opto-electronic protective device
- Identification of safety-critical deficiencies, modifications and manipulations as well as troubleshooting options
- Readjustment of the opto-electronic protective device and elimination of contamination (if required)
- Execution of the necessary maintenance of parts subject to wear in the opto-electronic protective device

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Overview Range of services Notes

Prerequisites

- Protective device is mounted, ready for operation and accessible
- Machine documentation is available
- Machine operators are available for the time of the inspection to make adjustments to the machine and to start the machine

Please note

- Especially for older SICK safety light curtains with wear (LVU, LVS ...)
- To determine the minimum distance for the protective device, specification of the machine stopping time is required. If this information is not available in writing, the stopping time can be measured via the SICK Service stop time measurement

Documentation

- Detailed inspection report on the processed test points and the test results
- Detailed log of the maintenance performed
- Award of a SICK test seal after successful inspection

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During periodic inspections, the effectiveness of the protective devices is checked and documented. This is done taking into account the current use of the machine within the legally required inspection intervals.

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- Testing of suitability of opto-electronic protective device for protecting the hazardous point according to the current use of the machine
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- Machine operators are available for the time of the inspection to make adjustments to the machine and to start the machine

Please note

- To determine the minimum distance for the protective device, specification of the machine stopping time is required. If this information is not available in writing, the stopping time can be measured via the SICK Service stop time measurement

Documentation

- Detailed inspection report on the processed test points and the test results
- Award of a SICK test seal after successful inspection

Safety Services portfolio
Verification and optimization
Inspection of protective devices
Initial inspection
Safety light curtain
Safety laser scanner
Periodic inspection
Safety light curtain
Safety light curtain with maintenance
Safety laser scanner
Stop time measurement
Accident investigation

Stop time measurement

Learn more at sick.com

Overview Range of services Notes

SICK stop time measurement establishes the machine stopping time. This is used as the basis for determining the safety distances according to EN ISO 13855.

- High quality measurements due to periodic calibration of measurement equipment
- You receive a report with the measurement results for the machine documentation
- Dangerous states due to non-compliance with required safety distances are identified
- High testing quality through certification and periodic inspections in accordance with IEC 17020 is carried out by independent bodies and with sustainable competency management

Safety Services portfolio

Verification and optimization

Inspection of protective devices

Stop time measurement

Accident investigation

Stop time measurement

Learn more at sick.com

Overview Range of services Notes

- Execution of stop time measurements of dangerous movements
- A stop time measurement is required for each dangerous movement
- The exact number of dangerous movements is determined by a service technician on site at the machine and charged according at time and material cost
- For each defined dangerous movement, a series of measurements of at least 10 individual measurements is performed
- Calculation of the required minimum distance between the hazardous point and the protective device according to the applicable standards (e.g. ISO 13855)

Safety Services portfolio

Verification and optimization

Inspection of protective devices

Stop time measurement

Accident investigation

Stop time measurement

Learn more at sick.com

Overview Range of services Notes

Prerequisites

- Protocol for the last stop time measurement conducted (if available)
- Operational machinery with installed and functioning protective devices and tools for the machine
- Experienced personnel who are familiar with the operation or maintenance of the machine in all operating modes

Please note

- During the stop time measurements, the machine is not available for production
- The range of services depends on the individually agreed number of measurements

Documentation

- Logging of measurements in a test report

Safety Services portfolio

Verification and optimization

Inspection of protective devices

Stop time measurement

Accident investigation

Accident investigation

Learn more at sick.com

Overview

As independent specialists, SICK experts investigate accidents and near-accidents on machines and draw up concrete proposals on how such incidents can be avoided.

- Ensuring that the causes of the accident or incident have been fully investigated and measures have been implemented to prevent a repeat occurrence
- Support in the event of an investigation by the insurance company or public prosecutor’s office
- You benefit from high testing quality through certification and regular audits according to IEC 17020 by independent bodies as well as sustainable competency management

Safety Services portfolio

Verification and optimization

Inspection of protective devices

Stop time measurement

Accident investigation

Modernization

Services related to the modernization of existing safety components

Safety Services portfolio

Consulting and design

Product and system support

Verification and optimization

Modernization

Training and education

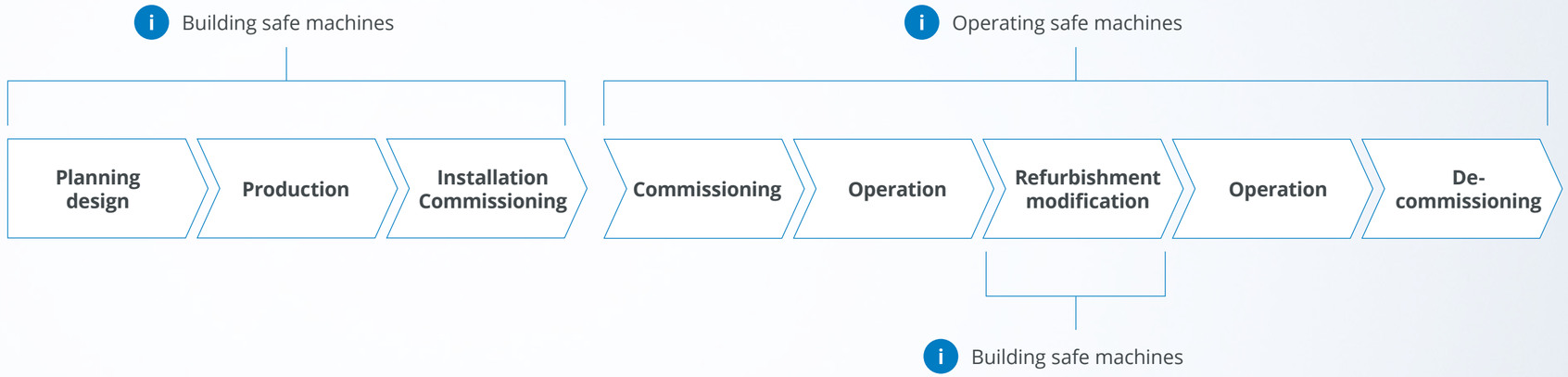
Training and education

Wide range of seminars and training courses on machine safety, application know-how and product knowledge

Safety Services portfolio
Consulting and design
Product and system support
Verification and optimization
Modernization
Training and education

The machine life cycle, from planning to decommissioning

As a manufacturer or end-user of machines, you are responsible for the safety of your employees in the production area and machine environment. However, the safety aspects can change during the machine life cycle. Each phase presents individual challenges. Find out when what matters.



Safety Services for machine manufacturers

Safety Services for machine end-users

The machine life cycle, from planning to decommissioning

As a manufacturer or end-user of machines, you are responsible for the safety of your employees in the production area and machine environment. However, the safety aspects can change during the machine life cycle. Each phase presents individual challenges. Find out when what matters.

Building safe machines

Planning design → **Production** → **Installation Commissioning**

Certified safety experts from SICK help you:

- Carry out an efficient and targeted risk assessment
- Develop an efficient safety solution with up-to-the-minute safety products and functions
- Fulfill normative requirements of the safety solution and comply with the respective applicable guidelines
- Verify and validate the safety solution

Note: Machines may have safety defects at the time of delivery. This happens when the safety solution used is not adapted to the activities on the machine and to the hazards of the machine, and normative specifications for the design have not been observed.

Safety Services for machine manufacturers

Safety Services for machine end-users

The machine life cycle, from planning to decommissioning

As a manufacturer or end-user of machines, you are responsible for the safety of your employees in the production area and machine environment. However, the safety aspects can change during the machine life cycle. Each phase presents individual challenges. Find out when what matters.

If machines are rebuilt and modified, you as the machine end-user become the machine manufacturer.
SICK supports you here with expertise and experience:

- Execution of or assistance with a risk assessment for converted machine parts
- Evaluation of whether it is a significant change
- Evaluation of the existing safety solution
- Development of a customized safety solution
- Execution of or assistance during the entire safety-related conversion work

Note: Machines may be unsafe after a conversion because existing safety solutions are often not designed and suitable for newly introduced hazards.

Safety Services for machine end-users who become machine manufacturers

Refurbishment modification

i Building safe machines

Safety Services for machine manufacturers

Safety Services for machine end-users

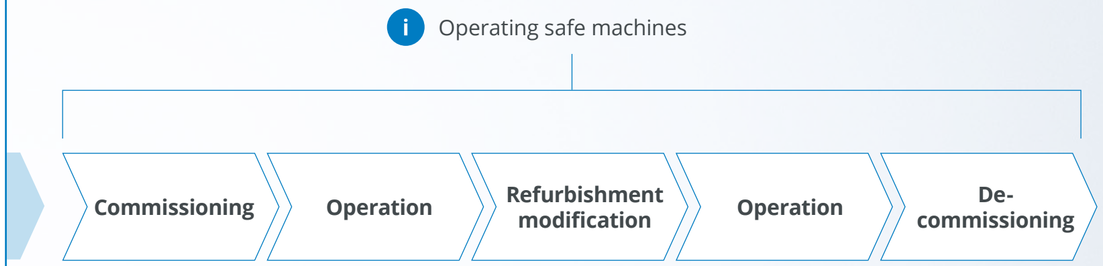
The machine life cycle, from planning to decommissioning

As a manufacturer or end-user of machines, you are responsible for the safety of your employees in the production area and machine environment. However, the safety aspects can change during the machine life cycle. Each phase presents individual challenges. Find out when what matters.

SICK helps you provide your employees with a safe machine:

- Evaluation of the current safety status
- Efficient and correct performance of a risk assessment
- Deficiency assessment of existing safety solutions
- Development of an improved and efficient safety solution
- Execution of or assistance during the entire safety-related conversion work

Note: Machines may be unsafe upon delivery, after years of operation, modifications, changes in regulations and standards, or due to changes made by personnel (manipulation).



Safety Services for machine manufacturers

Safety Services for machine end-users

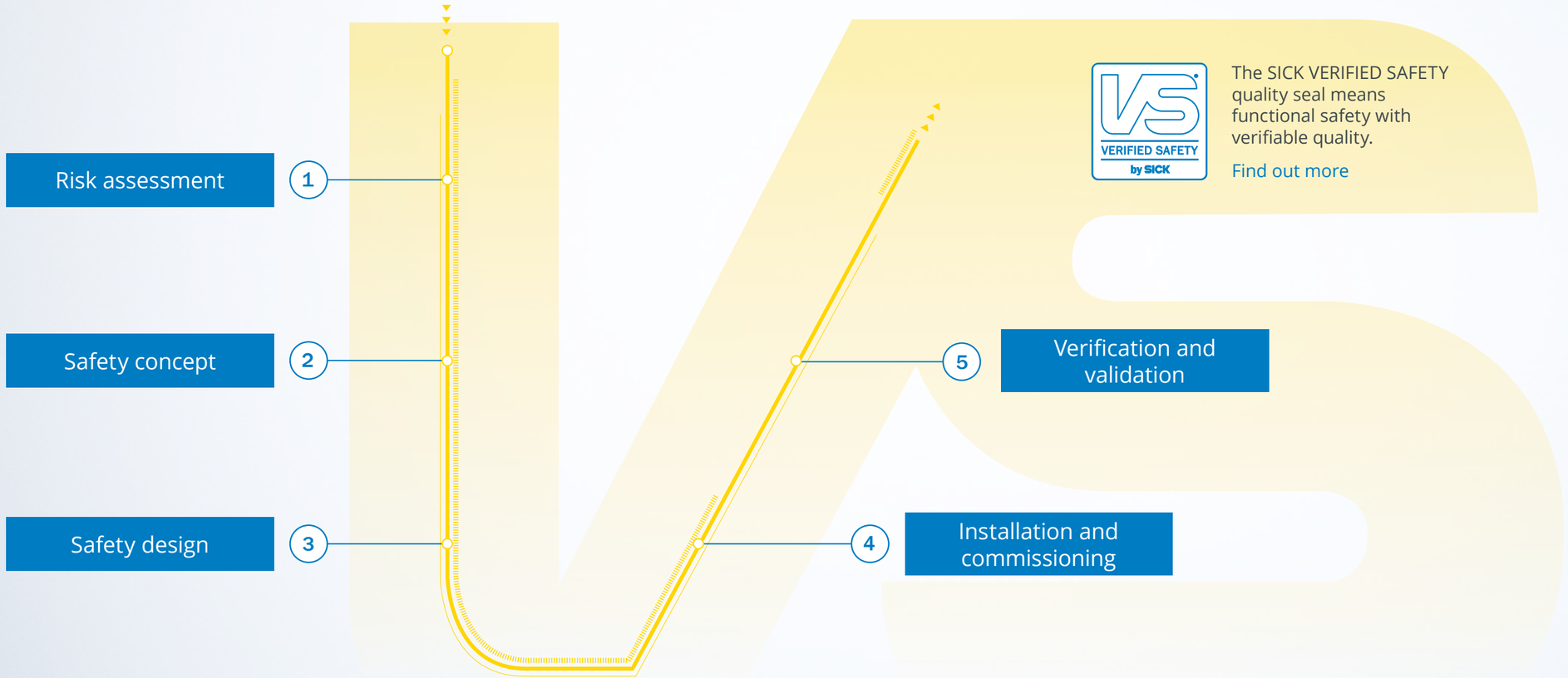
Safety Services for machine manufacturers

To get a safe machine, you have the choice: Take advantage of the experience and expertise of SICK in all phases or get targeted support for individual steps. The closer the cooperation, the better the safety solution can be integrated into your machine.

Consulting assistant

Safety Services for machine manufacturers

Safety Services for machine end-users



The SICK VERIFIED SAFETY quality seal means functional safety with verifiable quality.

Find out more

Phase 1 – Risk assessment

If the risk assessment is carried out during the design phase of a new machine, you will receive solution proposals for appropriate risk reduction measures at an early stage. You can implement these efficiently and in a targeted manner.

- You improve the safety and productivity of your machines and systems thanks to individualized coordination with SICK safety experts
- You benefit from standardized procedures and defined processes that ensure efficient risk assessments of the same quality worldwide
- Rely on the many years of experience of safety experts from SICK and save valuable time and resources so you can focus on your core business

Learn more at sick.com

Consulting assistant

Safety Services for machine manufacturers

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 2 – Safety concept

Learn more at sick.com

The safety concept from SICK provides you with an individual proposal for the creation of a safe and productive machine as early as during the design of new machines.

- You receive a targeted solution proposal taking into account normative requirements
- You benefit from standardized procedures and defined processes that ensure efficient safety concepts of the same quality worldwide
- Rely on the many years of experience of safety experts from SICK and save valuable time and resources so you can focus on your core business

Consulting assistant

Safety Services for machine manufacturers

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 3 – Safety design

Learn more at sick.com

Safety hardware design

- SICK provides you with detailed specifications for the efficient design of safety solutions tailored to your machine design
- You receive technical documentation, thus fulfilling the normative requirements
- You receive a safety solution individually tailored to your work processes with the aim of increasing the productivity of your machine

Learn more at sick.com

Safety software design

- SICK provides you with detailed specifications for the efficient design of safety-related application software (SRASW)
- You receive an SRASW that is adapted to the standard software of your machine
- You benefit from efficient machine integration
- You receive safe and reliable programming of the safety controller and meet the normative requirements

Consulting assistant

Safety Services for machine manufacturers

Phase 1 – Risk assessment

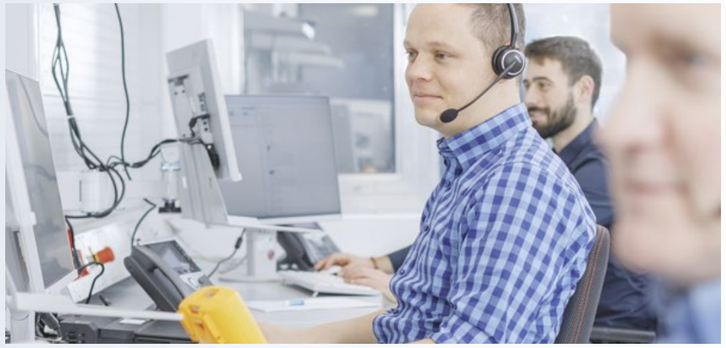
Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 4 – Installation and commissioning



Learn more at sick.com

Telephone support

- Save time and costs through fast, targeted analysis and troubleshooting by phone
- Technicians and engineers with background knowledge of your machine are at your disposal
- In countries where SICK has subsidiaries or representatives, this support is available in the respective local language

Learn more at sick.com

Commissioning of SICK safety products

- You benefit from high availability and productivity thanks to setup of the previously defined functions customized to the application
- Save time and money with efficient adjustment and alignment of the safety components
- You can feel secure about the future because SICK archives the parameters and commissioning documentation for possible conversion or maintenance work

Consulting assistant

Safety Services for machine manufacturers

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 5 – Verification and validation

Learn more at sick.com

Validation of functional safety

- SICK provides you with detailed and reliable verification of the safety solution
- You receive easily understandable documentation of the tests and corrections performed on the machine, thus fulfilling the normative requirements
- You benefit from standardized procedures and defined processes that ensure efficient validations of the same quality worldwide

Learn more at sick.com

Force and pressure measurement

- Certified safety specialists from SICK provide valuable data to help mitigate risks of your robot application
- You receive documentation that complies with the requirements of ISO/TS 15066, including an overview of limit values that have been complied with and exceeded
- You benefit from a structured process for fast and reliable measurement and can thus concentrate more on your core business

Consulting assistant

Safety Services for machine manufacturers

Phase 1 – Risk assessment

Phase 2 – Safety concept

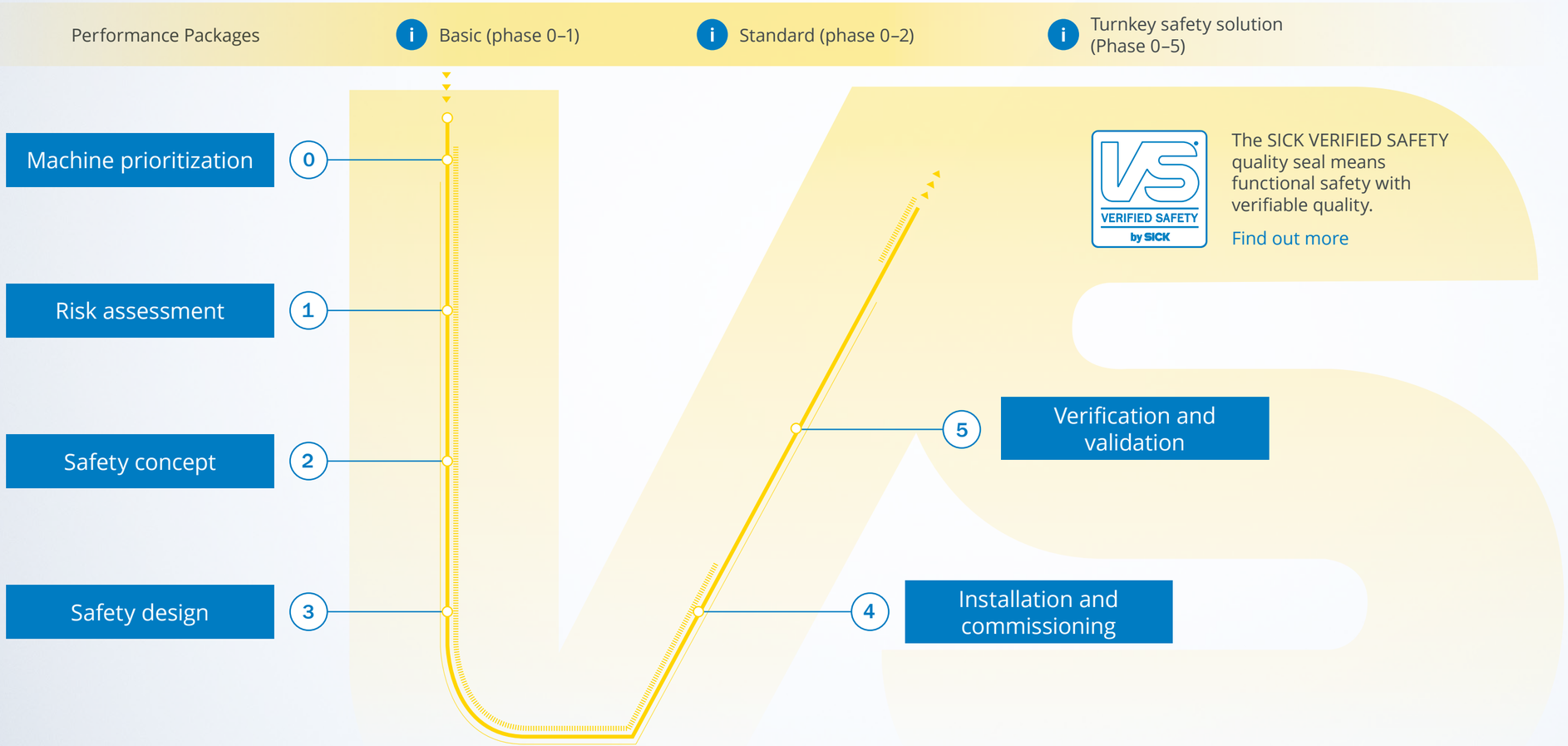
Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Safety Services for machine end-users

Certified safety experts accompany you step by step to obtaining a safe machine with professional project management.
Depending on your requirements, the scope of the project can be extended in phases and individually adapted to your needs.



Consulting assistant

Safety Services for machine manufacturers

Safety Services for machine end-users

Phase 0 – Machine prioritization

If several machines in your production plant are due for a risk assessment, SICK helps you prioritize which machine should be inspected first.

- You receive an analysis and safety rating of your production facilities
- You know the order of evaluation of your machines sorted by urgency and importance

Consulting assistant

Safety Services for machine end-users

Phase 0 – Machine prioritization

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 1 – Risk assessment

Machine safeguarding evaluation

- SICK identifies mechanical and electrical hazards and provides concrete statements on the urgency of improvement measures
- You gain detailed knowledge of the safety status of your machines and receive a risk assessment of the identified hazards

Learn more at sick.com

Risk assessment for machine conversions

- SICK provides you with solution proposals for appropriate risk reduction measures based on a targeted assessment
- Improve the safety and productivity of your machines and systems thanks to individualized coordination with SICK safety experts

Learn more at sick.com

Consulting assistant

Safety Services for machine end-users

Phase 0 – Machine prioritization

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 –
Installation and commissioning

Phase 5 – Verification and validation

Phase 2 – Safety concept

Learn more at sick.com

The safety concept from SICK provides you with an individualized proposal for implementing a safe and productive machine.

- You receive a targeted solution proposal taking into account normative requirements
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- Rely on the many years of experience of safety experts from SICK and save valuable time and resources so you can focus on your core business

Consulting assistant

Safety Services for machine end-users

Phase 0 – Machine prioritization

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Phase 3 – Safety design

Learn more at sick.com

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Consulting assistant

Safety Services for machine end-users

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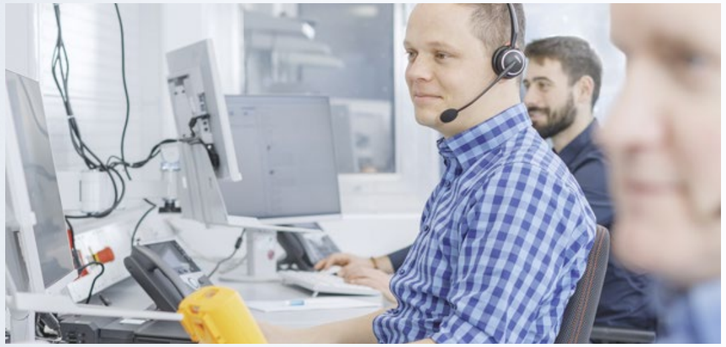
Phase 4 – Installation and commissioning



Learn more at sick.com

Telephone support

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Consulting assistant

Safety Services for machine end-users

Phase 0 – Machine prioritization

Phase 1 – Risk assessment

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Learn more at sick.com

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Consulting assistant

Safety Services for machine end-users

Phase 0 – Machine prioritization

Phase 1 – Risk assessment

Phase 2 – Safety concept

Phase 3 – Safety design

Phase 4 – Installation and commissioning

Phase 5 – Verification and validation

Expert partner worldwide

Think globally, act locally

In-depth application knowledge

Fields of application of SICK Safety

Turnkey safety solutions

The path to safe productivity with SICK

SICK safety innovations

Technology milestone

Comprehensive safety expertise

From performance level a to e

Examples from practice

Insights into customer projects

An expert partner worldwide

Safety applications often have a local significance while also having a global context. With one of the world's largest networks of certified safety experts, SICK can also visit your site and brings not only in-depth safety expertise, but also detailed knowledge of national and international standards and guidelines with an international vision.

At your side worldwide

A strong and competent team

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

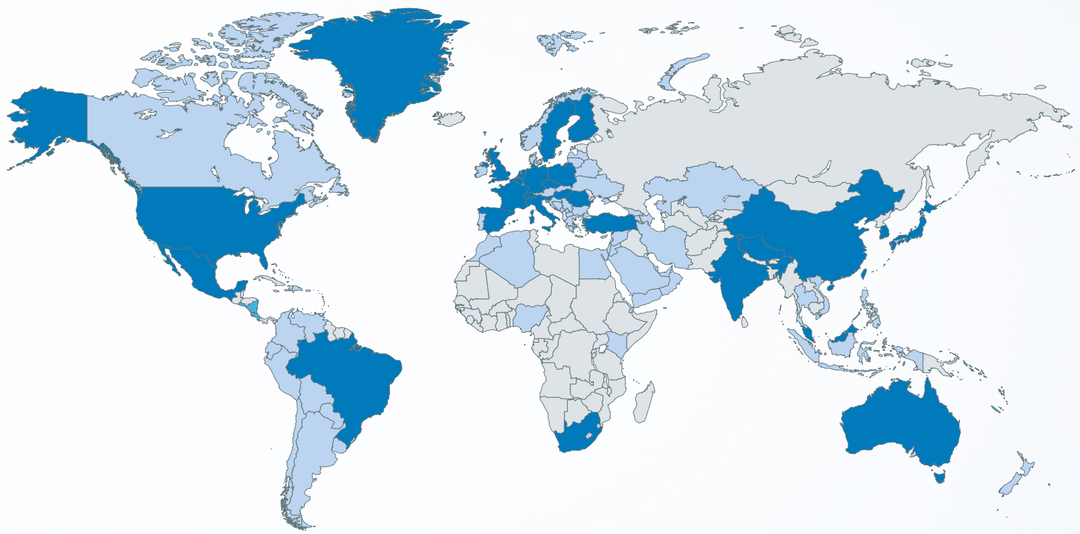
Practical examples

At your side worldwide – at your site as well

SICK is active in many countries: 150 experienced safety experts are now organized in a network spanning 80 countries.

Regional Competence Centers in Europe, North America and Asia are available to assist experts in the implementation of safety solutions. In this way, local projects can be supported across countries as needed, and international projects can be efficiently coordinated and implemented.

Learn more at sick.com



SICK subsidiaries with safety experts
SICK subsidiaries and agencies

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

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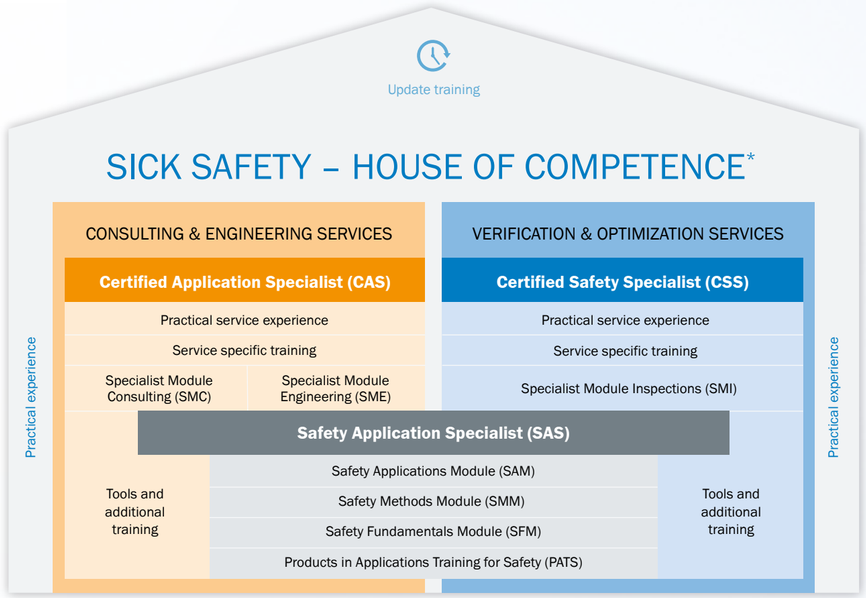
A strong and competent team – further training with certification

In a certification course on functional safety, SICK trains employees to become safety experts. In regular training sessions, their knowledge is brought up to date and (re-)certified.

The result: SICK safety experts in Asia have the same level of knowledge as their colleagues in North America. This is because SICK competency management provides the necessary expertise and country-specific knowledge so that SICK can offer you high quality safety expertise everywhere.

Learn more at sick.com



*Simplified representation of the process

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Practical examples

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In-depth application knowledge for safe and productive machines

As automation advances, the requirements for protecting machines are changing – in all industries. The safety experts at SICK focus on these requirements and have extensive application knowledge.

Discover these fields of application from SICK Safety:

Safe robotics

Safe mobile platforms

Outdoor safety

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

Safe robotics – productive safety solutions for collaborative robots

Safety solutions from SICK take the productivity of your systems a decisive step forward and allow for safe cooperation between man and machine. This can be achieved through adaptive perception of the environment with the help of intelligent, rugged and reliable sensors and safe systems. Together with a wide range of services, individualized Safe Robotics solutions are developed according to customer requests.

Safety Services for robots

- Comprehensive range of safety services individually tailored to your robot application, from initial consultation and risk assessment to commissioning and maintenance
- Training and education especially for collaborative robots
- Compliant with standards and guidelines, including DIN EN ISO 10218-2 and ISO/TS 15066

Learn more at sick.com

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

In-depth application knowledge

Safe mobile platforms

Safe mobile platforms – productive safety solutions for mobile transport vehicles

The production and logistics fields are being increasingly shaped by mobile platforms. More flexibility and efficiency are the order of the day. If you too want to design your processes to be future proof, then you're on the safe side with SICK. With modular, scalable safety solutions accompanied by comprehensive Safety Services, smooth processes are ensured both in- and outdoors.

Safety Services for mobile platforms

- Comprehensive range of safety services individually tailored to your mobile platform application: from the initial consultation to the risk assessment and to commissioning and maintenance
- Training and education specifically for mobile platforms
- Compliant with standards including ISO 3691-4, ANSI/ITSF B56.5:2019, ANSI/RIA R15.08-1:2020

Learn more at sick.com

Why choose SICK?

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In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

Safe robotics

Outdoor safety

Outdoor Safety – productive safety solutions for outdoor automation

Achieving a high level of productivity is a important not only for indoor but also for outdoor applications. When sensor technologies are used in outdoor applications, the sturdy design of the hardware and intelligence of the software are decisive factors. Safety solutions from SICK are reliable and powerful, even in adverse weather conditions. With Safety Services, SICK helps you achieve safe outdoor automation.

Safety Services for outdoor areas

- Comprehensive range of safety services individually tailored to your outdoor application, from initial consultation and risk assessment to commissioning and maintenance
- Training and education especially for Outdoor Safety
- Compliant with standards, including ISO 13849 and IEC 62998

Learn more at sick.com

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

Safe mobile platforms

Turnkey safety solutions

With a turnkey safety solution, you are supported by certified SICK safety experts from planning to validation of the safety solution. The project sequence is precisely defined. First, the objective and scope of the project are clarified. The basis for turnkey safety solutions is a machine safeguarding evaluation that identifies existing risks. Based on this, SICK shows you which shortcomings have to be remedied, and drafts a detailed solution concept. Then, SICK safety experts manufacture and install the solution on your machine as well as verify and validate the safety solution.

Efficient project processing

Once developed, it can be used internationally

3D planning in the digital twin of your machine

“VERIFIED SAFETY by SICK” quality seal

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

Efficient project management

Customer project management (CPM)
The standard project method established by SICK combines people, processes, and methods and ensures the successful implementation of customer projects.

On-site appointment
For a detailed assessment of the project, SICK will arrange an appointment at your site.

At your side
Your SICK customer project manager supports you from the beginning to the completion of your project. You benefit from fast, expert and solution-oriented responses to your individual requirements.

Establishment of a schedule
Your SICK project manager will determine the schedule together with you.

Cost-efficient offer calculation
The defined project scope is divided into several project sections, with a separate offer calculation. So you always have a clear view of costs.

Manufacture and installation
Depending on requirements, SICK also takes care of the necessary hardware, e.g. control cabinets, Fences, field wiring or device installation.

Project adjustments
Should any changes occur during the course of the project, your project manager will take care of the necessary steps and adjustments to the project order.

Why choose SICK?
An expert partner worldwide
In-depth application knowledge
Turnkey safety solutions
Safety innovations
Comprehensive expertise on safety and standards
Practical examples

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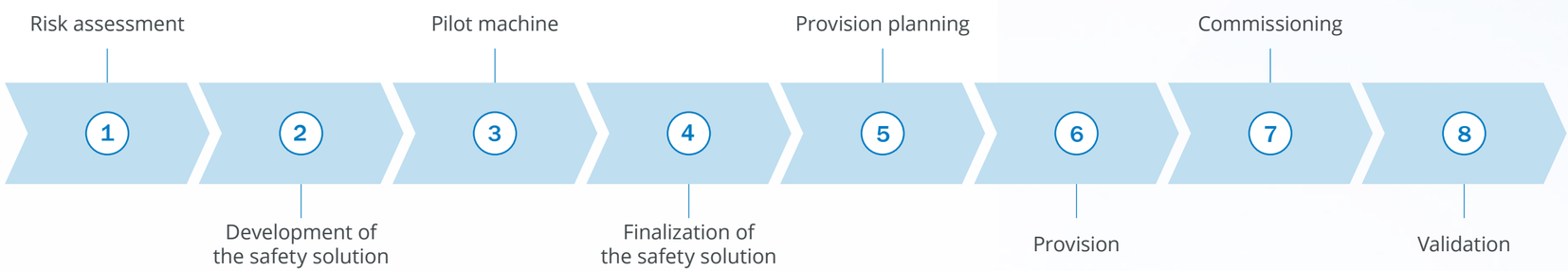
Once developed, it can be used internationally



- Efficient modernization of similar machines at different international locations
- Cost-efficient risk assessment and development of the safety solution on a reference machine
- Implementation of the safety solution on a pilot machine
- Cross-national transfer of the safety solution of the pilot machine to other machines of this type

Efficient project management

3D planning in the digital twin of the machine

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

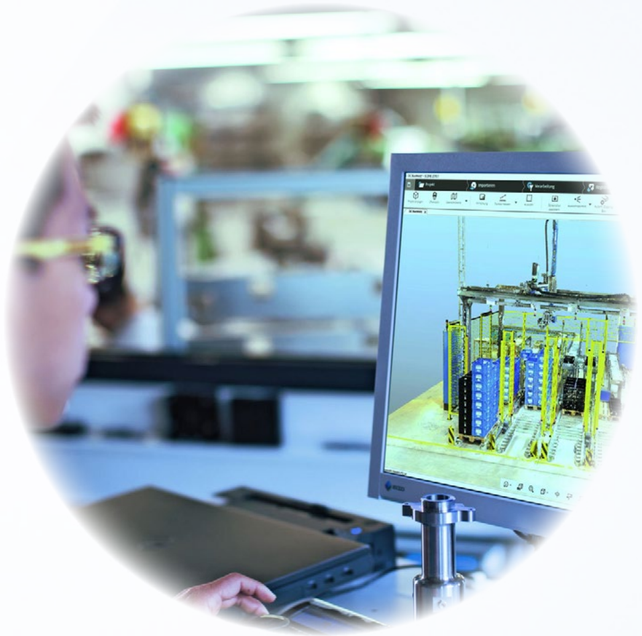
Comprehensive expertise on safety and standards

Practical examples

– 3D planning in the digital twin of the machine

- Creation of a precise 3D model of your existing machine using scanning technology
- Use of the 3D model for risk assessment and development of appropriate risk reduction measures
- Visualization of relevant minimum distances in the digital twin of your machine
- Production of a precise 3D safety concept for coordination and planning of the final safety solution

Learn more at sick.com



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Safety innovations

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Practical examples

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“VERIFIED SAFETY by SICK” quality seal

When creating and processing customer projects related to functional safety, the “VERIFIED SAFETY by SICK” quality seal ensures compliance with defined processes. For instance, as part of quality assurance and defined measures for error prevention, the work results are subjected to inspection by a second person. VERIFIED SAFETY from SICK means functional safety with verifiable quality.

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

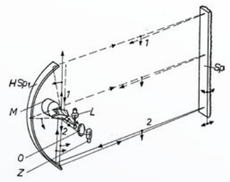
Practical examples

3D planning in the digital twin of the machine

Safety innovations

676 patents and 69 utility models from a total of 221 inventions: with these and more than 75 years of experience in functional safety, SICK is one of the most innovative and experienced companies in this area.

Discover these milestones in safety technology:



1950

First safety light-beam sensor

1952

Static accident prevention light curtain with hollow mirror, without mirror wheel

1989

First distance calculation with laser light using the time-of-flight of pulses principle

1993

First area scanner in safety category 3 for protecting hazardous areas

2006

Safety laser scanner S300

2013

Cost-saving cascading of safe switches and sensors within a machine

2016

SICK AppSpace combines software and hardware

2018

First safety laser scanner for outdoor use

Learn more at sick.com

Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

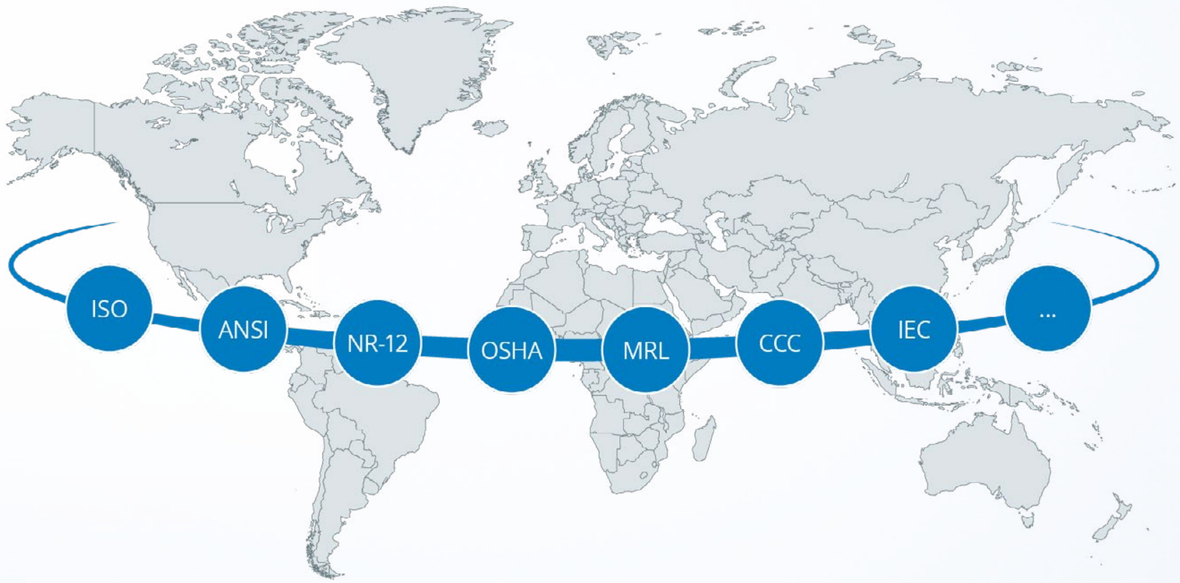
Comprehensive expertise on safety and standards

Practical examples

Comprehensive expertise on safety and standards

The globally valid standards and guidelines form the principles of machine-related safety. Guidelines describe general requirements that are specified by standards. The safety experts from SICK know these standards and guidelines. SICK actively contributes its expert knowledge to international standards committees and shapes future changes.

Further information on applicable guidelines and standards for machine safety can be found in the Guide for Safe Machinery



Why choose SICK?

An expert partner worldwide

In-depth application knowledge

Turnkey safety solutions

Safety innovations

Comprehensive expertise on safety and standards

Practical examples

In good hands from the start – examples from practice

Safety as a service: From risk assessment to validation at Eternit

"Machine safety services from SICK provided us with valuable, external safety know-how and additional expertise for protecting the new system. From the modular range of services, we put together an individual service package that perfectly met our needs."

Roman Felbinger, Maintenance Planning, Eternit

To the practical example

Hazardous area protection for tire curing presses at Continental

„We need to make sure that our tire curing machines are truly safe, which is why we need a partner that we can rely on to deliver the necessary services and machine acceptance processes throughout the world."

Timo Kuss, Global Project Manager and Plant Engineering Manager, Continental AG, Germany

To the practical example

International cooperation of DP World and SICK in anti-collision systems

„24/7 availability is paramount in container terminal operations. The anti-collision solutions from SICK play a key role in our new Jebel Ali terminal to ensure this availability and will help us to achieve new standards in efficiency and competitiveness for our customers."

Nabil Qayed, Technical Director, DP World, United Arab Emirates

To the practical example

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