Integrated Safety Engineering with SICK and Safexpert®

Workflow-oriented software for the CE marking in machine construction and engineering
With Safexpert®, SICK supports you with a thoroughly engineered solution for the demanding process of CE marking. Designers and managers will appreciate the systematic processes of this TÜV-certified software, which guide users through all the phases of CE marking, from risk assessment to the management of standards and documents. Safexpert® provides you with safety and saves you time and effort.

Safety engineering with Safexpert®

A step-by-step structure throughout all the phases of the CE conformance procedure – that is what the Safexpert® safety software offers. The latest version of the program is the result of many years of proven use and optimization, and features specially improved ease of use and a clearer layout.

Less effort, greater safety

Safexpert® helps designers to plan their path through the Machinery Directive logically and transparently, and then guides them efficiently along that path. In addition to making daily work easier, Safexpert® is also the perfect tool for building systematic safety know-how in any company that develops, produces, or converts machines and systems.
Integrating safety into the design process

The Machinery Directive 2006/42/EC requires the integration of safety into the design process – which is exactly what Safexpert® will help you to do. With Safexpert®, safety staff and managers can ensure that their products conform to the legal requirements, thus minimizing the risk of liability and providing greatly increased legal security.

“Many companies are still unsure of how to implement the conformance procedure and apply the relevant standards. The standards package Standard Plus and the Safexpert® software support them on the route to attaining the CE marking.”

Bernhard Köberlein,
Manager of Operational Safety at TÜV South Germany
The perfect partnership – SICK and Safexpert®

The combination of the benefits of Safexpert® with SICK’s achievements and experience offers unique synergy effects – the expertise and experience of one of the world’s largest manufacturers of sensors, controls and automation and safety technology is the perfect complement to the safety software’s ability to lighten your workload.

“CE by SICK”

Rely on SICK – rely on safety! With us, you can place your trust in the knowledge of experienced experts and our proven know-how in the safety industry. SICK’s professional staff possess an in-depth knowledge of the tasks involved in developing and converting machines – from the smallest device to complex production systems. These experts use Safexpert® for the CE conformance check within our own company and as part of the range of services we provide.

Global presence for safety worldwide

Multinational companies also profit from the combination of Safexpert® and SICK services, as SICK can provide global on-site consultation for any questions you may have. And with Safexpert® available in three different languages, you can create the basis for a uniform, international safety-engineering system throughout your company.
Services from planning to upgrade services

SICK can provide a specially tailored service for every phase in the life cycle of your machine or system. Whether you want a partial solution or a comprehensive package, you can turn to these services at any time.

- Safety concept
- Risk assessment
- Hardware design
- Software design
- Commissioning support
- Functional safety assessment
- CE conformance check
- CE certification
- Plant walk-through

“Safexpert® saves us up to 70% of the work involved in the CE process, thus allowing us to work on more projects at the same time. This reduces the overall processing time of our projects all around the world, and the machines are ready for production quicker.”

Matthias Ziegler, Continental AG, formerly of Siemens VDO AG, where he was responsible for CE and documentation for actuators
Structured safety for designers

Technically correct and all-encompassing – Safexpert® gives every user a route to safe machinery and a CE marking, with simple handling and automatic updates.

Step-by-step route to the CE marking

• CE guide
• Risk assessment
• Internal checks on the manufacture
• Checklist for technical documentation
• Checklist for operating instructions

Convenient and fast

• Structured information on the conformity assessment procedure in accordance with the Machinery Directive
• The required information is always on hand, thanks to directives and standards integrated into the software
• Convenient program and project updates in accordance with the directives
• Safexpert® automatically copies all the entered information into the relevant reports
• Built-in status and filter function provide a clear overview of data
• No “forgetting” of important points
• Directives are stored, automatic updates save time and provide security
• Interface to SISTEMA

The most important new features

• Completely new look & feel
• Improved usability and layout
• Automatic updates and license management via Internet
• Allows incorporation of photos and graphics
• Optimized display of list of hazards in accordance with C-standards
• Library importing/exporting

The compass to guide you through the jungle of standards and directives

• Requirements provided in the context of Machinery Directive EN ISO 12100 and EN ISO 13849-1
• Additional, customized standards package also available
• Cross-references for significant hazards in C-standards
• Depending on which edition of Safexpert® and which service contract you have, you can benefit from attractive offers when purchasing new standards
How managers can reduce the risk of liability

The consistent application of Safexpert® is highly practical, as it allows directors and supervisors to check at the push of a button whether all the required elements have been ticked off before they sign the CE Declaration of Conformity.

Reduced risk, greater legal security

- Reduction of liability risk
- Security against liability risks
- Safexpert® is an important component for engendering a "culture of safety" in any company that produces machines and systems

More efficient processes increase economy

- Integrated production monitoring provides higher product quality
- Direct compilation of technical documentation
- Operating instructions generated more quickly
- Central data storage
- Consistent safety management throughout the corporation, thanks to the three different languages available

Teamwork to reduce the load and increase safety

- Full network compatibility for coordinated processes
- Network can incorporate any number of workstations
- The perfect monitoring tool for project managers
- To-do lists
- Secure overview for large-scale projects
**Risk assessment**

- Clear structure due to modular composition of projects and subprojects
- Templates for projects, use of existing projects
- Archive functions
- Multiple network users working simultaneously on one project
- To-do lists displayed

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**1. Classification**

Definition of machine type

- Machine
- Interchangeable equipment
- Safety component
- Lifting accessory
- Incomplete machine
- Chains, ropes and webbing
- Removable mechanical transmission device

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**2. Application of directives**

Explanation of application of other directives

- Describe application of other directives, e.g. EMC, pressure equipment
- Test that software is up-to-date
- Always compliant due to automatic check

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**Safexpert® testimonials:**

- ABB Automation GmbH
- AM-Automation GmbH
- ArvinMeritor GmbH
- Berufsgenossenschaft der Feinmechanik und Elektrotechnik
- Continental Automotive GmbH
- Dematic GmbH
- Doll Fahrzeugbau AG
- ELWITEC GmbH
- Enetex Umwelttechnik und Luftreinhaltung GmbH
Safexpert® Step by Step to a safe machine

3 Application of standards
Research standards and directives

- StandardManager with data packages and full text documents
- Always compliant due to automatic check
- Continual updates in accordance with official journal of the European Union
- Automatic updates of full standard texts (depending on edition of Safexpert® and service contract)

4 Risk assessment
Risk assessment in conformance with standards and directives

- SISTEMA interface for systematic workflow
- Pictogram management
- Operating instructions assistant
- List of hazards and assessment
- Identify hazardous points
- Describe measures
- Create list of hazards in accordance with EN 12100, Annex B
- Performance level for technical safety measures in acc. with EN ISO 13849-1
- SIL in accordance with EN 62061
- Identification and determination of safety functions for SIL and performance level

- Federal Mogul Friedberg GmbH
- Freudenberg Anlagen- und Werkzeugtechnik GmbH
- FRIMO Group GmbH
- Gates Mectrol GmbH
- Graber AG
- H.I.T. Maschinenbau GmbH & Co. KG
- Häfner & Krullmann GmbH Kunststoff-Verarbeitungswerk
- Haver & Boecker OHG Maschinenfabrik
- Hochland Deutschland GmbH
- HYDRO Gerätebau GmbH & Co. KG
- IMS Messsysteme GmbH
- Indat
5 Technical documentation
Test for completeness

- Compilation of technical documentation
- Check for completeness of the operating instructions with regard to the requirements of the Machinery Directive
- Document management

6 Conformity assessment
Guided process

- Conformity assessment for Annex IV products
- EC Type Examination carried out by notified body
- Module of “Full quality assurance”
7 Internal checks on the manufacture

Quality monitoring

- Check whether the machine conforms to the technical documentation as per Annex VII of the Machinery Directive

8 Declaration of Conformity

CE-compliant machines and systems

Form for Declaration of Conformity/Incorporation

- Attachment of CE marking

EC declaration of conformity

according to the EU Machinery Directive 2006/42/EC, Annex II A

Description and identification of the Machinery

<table>
<thead>
<tr>
<th>Product/Article</th>
<th>Type</th>
</tr>
</thead>
</table>

Machine number

- Specification name
- Order
- Function

It is expressly declared that the Machinery the machinery fulfills all relevant provisions of the following EU Directives.

2000/14/EC

Distributed by SICK AG

• Wanzl Metallwarenfabrik GmbH
• WSP GmbH
• ZF Passau GmbH
Technically correct and all-encompassing – Safexpert® gives every user a route to safe machinery and a CE marking, with simple handling and automatic updates.

Operating instructions assistant

With the operating instructions assistant (OIA), your documentation is produced faster, is always complete, and stays up-to-date. Responsive measures can be transferred directly from the risk assessment into the relevant overviews or operating instructions (in Microsoft Word) and updated automatically. An example of operating instructions is available as a template for the OIA.

Check and acceptance assistant

The check and acceptance assistant (CAA) gives you a structured system for checking that your machines comply with the relevant regulations.

- Create your own checklists or adapt existing ones
- Checklist for conformance with Machinery Directive included
- Other checklists available as options
- Clear reports make machine acceptance easier
- Can be used independently of Safexpert®
Safexpert® – impressive over the entire process

- Practical software for systematic and efficient CE marking
- Interface to SISTEMA ensures optimum workflow
- StandardManager module provides a clear view through the jungle of standards
- Full range of languages for multinational companies
- Fully network-compatible for perfect teamwork
- Automatic update algorithms making checking projects easy
- Creation of customized libraries
- Modular project structure allows a clearer overview
- Innovative handling for optimized ease of use

Easy-to-learn basics and in-depth specialist features

Process guidance and helpful cross references make Safexpert® easy to learn and simple to operate. So why not switch straight to Safexpert® for your next project? We can provide customized training courses and in-house workshops to explain Safexpert® in terms of your projects and processes.

“Safexpert® supports us in the implementation of the entire conformance process. Safexpert’s software updates allow us to adapt to changes in standards and directives in the CE marking attainment process, which saves us a lot of work.”

Michael Kunzmann, technical editor at Freudenberg Anlagen- und Werkzeugtechnik GmbH
Overview of versions and modules

Which version of Safexpert® is perfect for you?

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STEP 1
I am a new Safexpert® customer.

Yes

No

Updates carried out automatically for service and update contracts

STEP 2
I also wish to use Safexpert® to research standards and check that my project templates are up-to-date.

Yes

No

Safexpert® Basic
+ SE Basic service contract
+ Optional additional modules

STEP 3
I wish to take advantage of the savings on standards and use the automatic update service for full text standards.

Yes

No

Safexpert® Compact
+ SE Compact service contract
+ EU Machinery Directive data package
+ EU Plus data package
+ Optional additional modules

Safexpert® Professional
+ SE Professional service contract
+ EU Machinery Directive data package
+ EU Plus data package
+ Optional additional modules

A personalized license card is provided with each copy of Safexpert® as proof of purchase. The license key printed on the card enables the user to activate their software configuration online.

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Overview of items

<table>
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<tr>
<th>Code</th>
<th>Initial license</th>
<th>License extension</th>
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<tbody>
<tr>
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<td>6044903</td>
</tr>
<tr>
<td>Safexpert® Compact</td>
<td>2057767</td>
<td>6044904</td>
</tr>
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</tr>
<tr>
<td>Safexpert® Professional (E)</td>
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<tr>
<td>EU Plus data package</td>
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<tr>
<td>Standards package Standard Plus (D)</td>
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</tr>
<tr>
<td>Standards package Standard Plus (E)</td>
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</tr>
<tr>
<td>Operating instructions assistant</td>
<td>6044923</td>
<td>6044924</td>
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<tr>
<td>Check and acceptance assistant incl. 2006/42/EC checklist (D)</td>
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<td>6044930</td>
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<tr>
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<td>Service contract for Professional</td>
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<td>Service contract for check and acceptance assistant</td>
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<td>Service contract for standards package Standard Plus</td>
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## The versions of Safexpert®

<table>
<thead>
<tr>
<th>Feature</th>
<th>Basic</th>
<th>Compact</th>
<th>Professional</th>
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</thead>
<tbody>
<tr>
<td><strong>Project management for safety engineering</strong></td>
<td></td>
<td></td>
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<tr>
<td>CE guide – 8 steps to the CE mark</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Risk assessment including list of hazards as per EN ISO 12100</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Project and system management for safety engineering</td>
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<td>•</td>
<td>•</td>
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<tr>
<td>Log and document management</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>History logging for quality assessment</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Library function for saving and recalling previously used solutions</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Machinery Directive</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>EMC Directive</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td>Low-voltage Directive</td>
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<tr>
<td>StandardManager</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td><strong>Collection of symbols</strong></td>
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<td></td>
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</tr>
<tr>
<td>Graphic symbols in WMF format</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Mandatory, prohibited, warning, emergency, fire safety and hazard signs</td>
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<td>•</td>
<td></td>
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<tr>
<td><strong>Example of EU-compliant operating instructions</strong></td>
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<td></td>
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</tr>
<tr>
<td>15 chapters with many tables and checklists, incl. important limitation of liability clauses</td>
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<tr>
<td><strong>Original versions of 9 standards</strong></td>
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<tr>
<td>In Windows®-integrated help system (supplied in German or English)</td>
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<td>•</td>
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<tr>
<td>Full text of original standards from ICS number range 13.110, “Safety of machinery”</td>
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## Additional modules

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<tr>
<th>Module</th>
<th>Basic</th>
<th>Compact</th>
<th>Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating instructions assistant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accompanies the engineering process and provides support for the generation of operating instructions for machines and systems</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td><strong>Check and acceptance assistant</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consistent test and approval procedures for machines and systems, with clear test logs</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td>Machinery Directive-compliant checklist included, other checklists available (EN ISO 14121, Ordinance on Industrial Safety and Health), also supports creation of own checklists</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
</tr>
<tr>
<td><strong>Standard PLUS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete text for up to 50 additional original standards from the ICS number range 13.110 “Safety of Machinery”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High-speed search function for finding information within standards</td>
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<tr>
<td><strong>Standard PLUS C</strong></td>
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</tr>
<tr>
<td>Full text of selected C standards</td>
<td>optional</td>
<td>optional</td>
<td>optional</td>
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</tbody>
</table>
SICK at a glance

Leading technologies

With a staff of more than 5,000 and over 50 subsidiaries and representations worldwide, SICK is one of the leading and most successful manufacturers of sensor technology. The power of innovation and solution competency have made SICK the global market leader. No matter what the project and industry may be, talking with an expert from SICK will provide you with an ideal basis for your plans – there is no need to settle for anything less than the best.

Unique product range

• Non-contact detecting, counting, classifying and positioning of any type of object
• Accident and operator protection with sensors, safety software and services
• Automatic identification with bar code and RFID readers
• Laser measurement technology for detecting the volume, position and contour of people and objects
• Complete system solutions for analysis and flow measurement of gases and liquids

Comprehensive services

• SICK LifeTime Services – for safety and productivity
• Application centers in Europe, Asia and North America for the development of system solutions under real-world conditions
• E-Business Partner Portal www.mysick.com – price and availability of products, requests for quotation and online orders

Worldwide presence with subsidiaries in the following countries:

Australia
Belgium/Luxembourg
Brasil
Ceská Republika
China
Danmark
Deutschland
España
France
Great Britain
India
Israel
Italia

Japan
Nederland
Norge
Österreich
Polska
Republic of Korea
România
Russia
Schweiz
Singapore
South Africa
Suomi
Sverige
Taiwan
Türkiye
United Arab Emirates
USA/Canada/México

Please find detailed addresses and additional representatives and agencies in all major industrial nations at www.sick.com

SICK
Sensor Intelligence.