MACHINERY SAFETY TRAINING

CERTIFIED FUNCTIONAL SAFETY APPLICATION TRAINING FOR TECHNICIANS & EXPERTS

CFSAT - SGS-TÜV Saar **CFSAE** - SGS-TÜV Saar

SICK
Sensor Intelligence.

SICK is now offering two Certified Functional Safety Training courses. The **CFSAT** and the **CFSAE**. These comprehensive classroom based courses are taught by SICK machine safety experts and are a well thought-out combination of theory and practice with a high degree of interaction.

Both courses also offer **Certification by SGS-TÜV Saar.** After completing the course you can take an optional exam. On passing you will receive a qualification certificate and may use the title 'Certified Functional Safety Application Technician' or 'Certified Functional Safety Application Expert' on your business card.

CERTIFIED FUNCTIONAL SAFETY APPLICATION TECHNICIAN (CFSAT)

WHAT DOES THE COURSE COVER?

Over the three days you will cover:

- Fundamental standards & regulations for safe machinery including ISO 12100, ISO 13849, and EU Machinery Directive, EU Work Equipment Directive.
- Inspection of the installation of protective devices
- Identification of hazards
- Identification of safety relevant impairments for machine operators
- Application of measures to maintain operational safety
- Support when purchasing machines with safety-related requirements.

The optional 2 hour exam for Certification will take place after the 3 day course has been completed.

WHO SHOULD ATTEND?

The CFSAT Course is aimed at Maintenance Service and Maintenance staff, Safety officers, System integrators and Designers with basic level knowledge of machinery safety.

ELIGIBILITY REQUIREMENTS

To be able to complete the course you will need to have:

- At least 2 years of work experience with industrial machinery.
- Basic knowledge in automation technology and familiar with the requirements of electrical safety
- Basic knowledge in Functional Safety standards and regulations

WHAT ARE THE LEARNING OUTCOMES?

On completion of the course, you will be able to:

- Check of the correct mechanical and electrical installation of protective devices
- Evaluate and verify protective devices according to a specification
- Identify hazards
- Give advice on protective devices
- Support of the purchase department to specify the safety related requirements for machines and production lines
- Propose actions to maintain the safety of machinery
- Recognise safety related impairments for machine operators and lack of machine safety.

CERTIFIED FUNCTIONAL SAFETY APPLICATION EXPERT (CFSAE)

WHAT DOES THE COURSE COVER?

Over the four days you will cover:

- Use of technical standards and standardisation
- Risk assessment and risk reduction (ISO 12100)
- Safeguarding and complementary protective measures
- Requirements for safety functions on machines
- Application of protective devices
- Determining minimum distances of safeguards
- Integrating protective devices into control systems.

The optional half day exam for Certification will take place after the 4 day course has been completed.

WHAT ARE THE LEARNING OUTCOMES?

On completion of the course, you will:

- Be able to review, select and integrate protective devices to effectively reduce hazards associated with machinery including complete circuit and schematic requirements
- Be able to analyse and carry out the technical measures required for risk reduction such as, identification of faults, their root causes, potential weak areas and the reliability of protective systems
- Perform calculations, define a validation plan, and complete documentation according to ISO 13849 and IEC 62061
- Refresh your knowledge on the requirements of the standards on functional safety.

WHO SHOULD ATTEND?

The CFSAE Course is for Machine builders, systems integrators, developers and applications engineers with responsibility for machinery safety and have a comprehensive knowledge of machinery safety.

ELIGIBILITY REQUIREMENTS

You will need to have:

- In-depth knowledge of machine safety applications
- Professional experience in functional safety
- Existing working knowledge of functional safety standards and best practices
- Comprehensive knowledge of the following standards: ISO 13849, IEC 61508, IEC 62061
- Experience and understanding in the field of functional safety management
- Practical experience in the quantification of PL and SIL.

WHAT ARE THE BENEFITS OF TRAINING?

- Both the CFSAT and the CFSAE will increase your value as an employee as you will be able to make a contribution to operational safety in your company
- You will experience training conducted by experts with extensive technical know-how and years of experience
- You will benefit from structured, practical knowledge transfer and helpful training material for your daily work
- You can exchange ideas and experience with other delegates working with safety-related applications
- Help career progression by providing certificated proof of your competence and experience. You can use the title ‘Certified Functional Safety Application Technician’ or ‘Certified Functional Safety Application Expert’ title on your business card if you pass the optional exam.

COMMONLY ASKED QUESTIONS ABOUT THE COURSES

CAN YOU COMPLETE THE COURSE, BUT NOT TAKE THE EXAM?

Yes; the exam is optional. However, continuous participation in the course and passing the exam are required to obtain the CFSAE or the CFSAE certificate. If a delegate does not want to take the exam, they do not need to pay the exam fee.

WILL THE COURSE COVER THE STANDARDS IN DETAIL?

They CFSAE will cover the standards in detail. Both courses formalise delegates existing knowledge of Functional Safety.

WILL COPIES OF THE STANDARDS BE INCLUDED WITH THE CLASS?

Attendees are advised to obtain their own copies of the standards.

WHAT FORMAT WILL THE EXAMS TAKE?

Both exams will be multiple-choice questions. The CFSAE exam also contains open questions, e.g., calculations of PL and SIL.

WHAT HAPPENS IF I DON'T PASS THE EXAM?

You are encouraged to retake the course and /or the exam only, after at least 6 months of further study and experience.

HOW LONG DOES THE CERTIFICATION LAST?

There is no expiry date on the CFSAT certificate. Once you have gained enough work experience you might wish to take the CFSAE course.

The CFSAE certification lasts five years. To extend it you must submit evidence that shows your knowledge is still up to date and you are applying the regulations in your work.

WHERE IS THIS TRAINING OFFERED?

This training is available at a SICK Training facility or at a customer's site. See dates and venues.

HOW MUCH DOES IT COST?

CFSAT Part no. 1614670: Course only: £1,504.14 + VAT Optional exam: £283.80 + VAT

CFSAE Part no. 1610643: Course only: £2,223.10 + VAT Optional exam: £283.80 + VAT

Registration details

SICK (UK) LTD
Waldkirch House
39 Hedley Road
St Albans
Herts
AL1 5BN

T: +44 1727 83112
email: info@sick.co.uk

www.sick.co.uk

SGS TÜV SAAR

SICK Sensor Intelligence.