

Machinery Safety

EN 13849-1 AWARENESS TRAINING



Introduction

Safety-related control system architecture continues to develop bringing complex requirements often due to the way workers and machinery interact with each other. This awareness course offers an understanding to the requirements of the safety standard EN ISO 13849-1:2023 – Safety of machinery. Safety-related parts of control systems.

The aim is to convey the processes and steps that are salient to the evaluation of safety-related control systems when applied to machinery design.

Content

- Safety regulations and standards (introduction)
- Standards for safety-related control systems
- EN ISO 13849-1
- Overview of the design principles for safety-related control systems
- Calculation of the performance level (PL)

Overview

Throughout the course, you'll explore the basics of functional safety, learn the structure and application of EN ISO 13849-1 safety concepts and discover risk analysis techniques.

The learner

Whether you're looking to advance in your current role or take on new challenges, this awareness course will serve as a key asset in your continual professional development.

Target audience

- Design Engineers
- Engineering Managers/Projects
- Safety Personnel
- Machinery Safety Engineers

Learning outcomes

- An understanding of the various parts of EN ISO 13849
- Understand the meaning of the terminology: Performance Level (PL), Diagnostic Coverage (DC), Common Cause Failure (CCF), Mean Time to Dangerous Failure (MTTFd)
- Appreciation on how to integrate safety-related parts of the control system (SRP/CS) into control philosophy
- Identify ways to minimize or prevent failure of safety functions and to detect when failures occur
- Walkthrough examples of calculating the (PL) required for various safety functions

Industries covered

- Manufacturing
- Food and Beverage
- Automotive
- Oil & Gas
- Metal forming
- Pharmaceutical
- Waste Recycling
- Plastics
- Chemical
- Mining
- Electronics
- Renewables
- and more

The SGS commitment

We strive to deliver outstanding value at every step of your training in being committed to add value to your work by providing:

- Rapid turnaround time
- Value-based pricing
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- Key account management
- Accurate and timely reporting
- Quality and trusted test results
- In long-term partnerships our input will increase the return on your investment



When you need to be sure

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