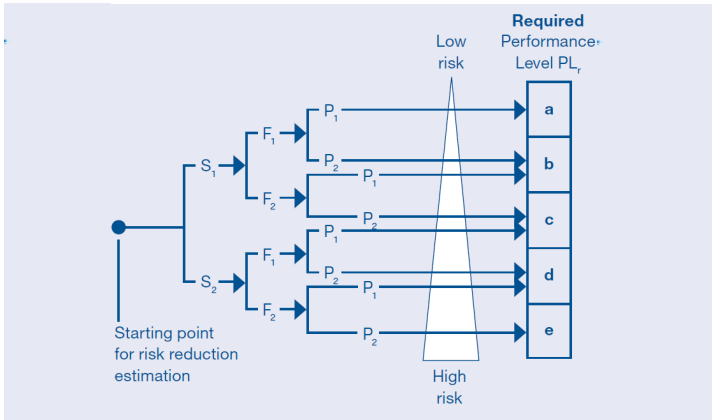
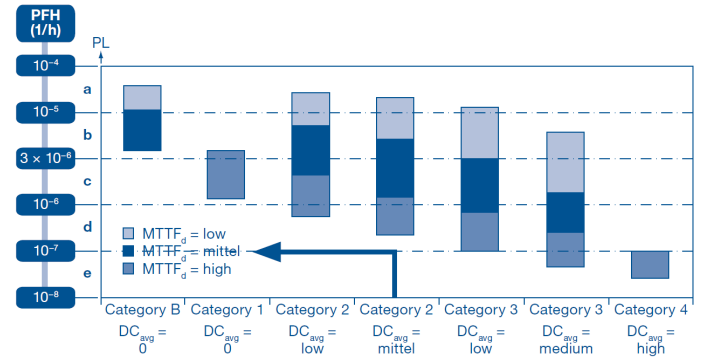


# MACHINE SAFETY TRAINING COURSE

## ISO13849—UNDERSTANDING & IMPLEMENTATION



Bar chart



### A REVIEW OF CONTROL CATEGORIES AND SAFETY CIRCUITS WIRING

ISO13849 is a global harmonized standard relating to the risk assessment, design, and performance of safety control systems on machinery. This standard is accepted worldwide as the principle safety control design guideline and it represents a major change in the philosophy of hazard analysis and design of safety related parts of machine control systems.

Let **tec.nicum** help you take a step into the world of machine safety with our ISO13849 course.

#### COURSE OUTLINE:

- Why ISO13849 was created
- How to apply it to a machine
- Understanding Performance Levels (PL)
- Control Categories
- CCF – Common Cause Failures
- DC – Diagnostic Coverage
- MTTFd (Mean Time to Dangerous Failure)
- PFHd (Probability of Dangerous Failure per Hour)
- B10dMission Time
- Symbolic Blocks
- Fault Exclusions
- Validation
- Maintenance
- Documentation
- Calculating Safety Functions
- SISTEMA
- Working Examples

This course can be presented in person in one day, or broken up into multiple sessions for online (live)

A TÜV Certified Functional Safety Engineer for Machinery from our **tec.nicum** Group will be presenting this training. Their experience will bring the expertise that you are looking for in a machine safeguarding specialist.

For more information regarding this training or our other Engineering Services, please contact:

#### Devin Murray

**tec.nicum** Services Manager

FS Engineer (TÜV Rheinland, #4274/11, Machinery)

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