



TRAINING

Safety Training CS9



Safety functions CS9

Content

- Basics on relevant standards and the CE certification process
- Risk assessment process with the development of risk reduction measures
- Safety architecture of CS9
- Presentation of the individual functions
 - Cartesian zones
 - Cartesian speeds
 - Safe axis limits, speeds
 - Stop functions of the robot (SS0, SS1, SS2)
 - Safe tools
- Discussion of the functions, through the use of practical example
- Presentation of the configuration software Safe PMT and SRS
- Practical implementation on the topic using relevant examples and exercise

Goal

Identifying possibilities and the implementation of the new safety functions for system design and robot programming.

Participants

Designers, programmers, safety engineers

Prerequisites

none

Recommendation

- basic understanding of machine safety
- for programmers: Programming Training recommendable

Benefits for the participant

- Quick introduction to the configuration of the safety aspects in CS9 robot systems
- Elaboration on the relevance of the standards ISO 13849, 10218, 12100 and ISO/TS 15066 for the design of robot systems
- Assessment of the impact which the safety functions within CS9 have on existing operations, e.g. impact on cycle time, space requirements within the cell, and cell footprint
- Targeted implementation of modern safety concepts, especially with regard to the optimum design and integration of protective devices used for operator safety

Duration: 4.5 days

Course number: 9.5

Location: Bayreuth, Asten, Hannover