

Safety Solutions training

Honeywell Safety Management Systems Training schedule.

Fixed training dates for training at:
Honeywell Safety Management Systems
Rietveldenweg 32a
5222 AR 's-Hertogenbosch,
The Netherlands

All Safety Solutions training are also available on request at other Honeywell locations or at customers sides.

For more information, please contact the training group at:
sms-fsc-training@honeywell.com

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FSC Training Schedule

FSC Managers Overview course (4501) – 1 day

Wednesday – schedule 2006 location: The Netherlands

>> February 15

>> April 5

>> July 5

>> October 4

Overview

This one-day course provides an overview of all basic features and functions of the FSC system. The course is intended for both technical and non-technical managers in areas including operations, engineering, production, maintenance, purchasing, finance, and human resources. Students will learn what the FSC system is, what it can do, what information it can provide, and what is involved in implementing, operating, and maintaining it.

Prerequisites - None

Course Content

This course covers the following topics:

- Overall FSC philosophy
- FSC configuration and structure
- FSC hardware
- Designing functional logic diagrams (FLDs)

FSC Training Schedule - continue

FSC On-Line Modification (4502) – 2 days

Monday – Tuesday – schedule 2006 location: The Netherlands

- >> February 13 and 14
- >> April 3 and 4
- >> July 3 and 4
- >> October 2 and 3

Overview

The FSC controller is capable of handling all kinds of modifications online, with only very few restrictions. To be able to perform these modifications, and to learn everything there is to learn about online modifications, Honeywell developed the Online Modification (OLM) course. This two-day course is designed to make people feel confident performing an OLM. It will demonstrate how to modify an application, upgrade to a newer software release, and even how to add or remove additional hardware online. All the exercises will be done using running FSC systems.

The training can be given at Honeywell SMS in the Netherlands, or at location.

Prerequisites

Participants to the OLM course must already have completed the FSC Implementation course (4508)

Course Content

This course covers the following topics:

- Brief review of FSC configuration and structure
- On-line modification of the application
- On-line modification of the system software
- On-line modification in conjunction with TPS100
- On-line modification of hardware modules
- Do's and don'ts regarding on-line modification

FSC Training Schedule - continue

FSC Maintenance course (4505) – 4 days

From Tuesday till Friday schedule 2006 location: The Netherlands

>> January 31 to February 3

>> March 21 till 24

>> June 20 till 23

>> September 19 till 22

Overview

This four-day course provides the training for maintenance personnel to enable them to support the FSC System with first-call maintenance.

Prerequisites

- Knowledge of process control, instrumentation, and a general electrical background.
- Background experience in primary and final control elements and their function is helpful, along with any previous PLC Implementation, Configuration, and Installation and Maintenance experience.
- If the FSC is used in a Experion - PKS environment, knowledge of the Experion server, operator station, and FTE status detail displays is required.
- If the FSC is used in a TPS environment, knowledge of the LCN and UCN status and detail displays is required.
- Working knowledge of PC Windows interface (logging on, desktop operation, navigation, starting programs, file operations.)

Course content

This course covers the following topics:

- Overall FSC philosophy
- FSC configuration and structure
- FSC hardware
- Working with the functional logic diagram
- Programming and installing the FSC system
- Working with the FSC on-line package
- Diagnostics
- Loading applications / on-line modifications
- Working with the FSC and data exchange via FTE with Experion - PKS, including diagnostics.
- Working with the FSC and Safety Manager Module (SMM) data exchanges, and TPS100
- (SMM) diagnostics.

FSC Training Schedule – continue

FSC Implementation course (4508) – 4 days

From Tuesday till Friday – Schedule 2006 location: The Netherlands

>> February 7 to 10

>> March 28 till 31

>> June 27 to 30

>> September 26 to 29

Overview

This four-day course provides the training for Engineering personnel in the implementation of FSC projects. It covers the technical aspects of the system, including safety and availability considerations. Programming of the system is included, as well as the communication with the Experion - PKS.

Prerequisites

Knowledge of process control, instrumentation, and a general electrical background.

Logic and configuration experience.

Background experience in primary and final control elements and their function is helpful, along with any previous PLC Implementation, Configuration, and Installation and Maintenance experience.

If the FSC is used in a TPS environment, knowledge of the LCN and UCN status and detail displays is required.

Working knowledge of PC Windows interface (logging on, desktop operation, navigation, starting programs, file operations.)

Course content

This course covers the following topics:

- Overall FSC philosophy
- FSC configuration and structure
- FSC hardware
- Design of the functional logic diagrams
- FSC on-line package
- FSC database and database packages
- FSC programming
- Programming the FSC and SMM (TPS100) to enable data exchange, and
- TPS100 (SMM) diagnostics.
- Setting up and using communication between FSC and Experion - PKS, including system diagnostics.

FSC Training Schedule - continue

FSC Advanced course (4512) – 5 days

From Monday till Friday - schedule 2006 location: The Netherlands

>> February 20 to 24

>> April 10 to 14

>> July 10 to 14

>> October 9 to 13

Overview

This five-day course covers the FSC system basics programming, the operation, troubleshooting techniques, diagnostics and on-line changes. Students perform systematic troubleshooting. Approximately 50% of course time is devoted to hands-on laboratory exercises. The latest system hardware will be used in conjunction with the latest software features, such as flash memory operation and the Experion - PKS integration.

Prerequisites

Participants to the Advanced course must already have completed the FSC Implementation course (4508), and must also have experience with FSC systems in general.

Course content

This course covers the following topics:

- Fault-finding before and during on-line modification
- Introduction of the latest FSC releases
- Working with FSC and Experion - PKS / Plantscape
- Working with FSC and TDC / TPS,
- Working with flash memory ("full download option")
- Explanation and demonstration of potential faults
- Fault-finding methods
- On-line modifications on FSC systems:
- Upgrade from old releases up to the latest releases
- Application changes
- Together with TPS
- Together with Experion - PKS
- Communication aspects
- Questionnaire overall FSC philosophy

Safety Manager Training Schedule

Safety Manager Maintenance course (4550) – 4 days

From Tuesday till Friday – schedule 2006 location: The Netherlands

>> January 17 to 20

>> May 2 to 5

>> August 29 to September 1

>> November 7 till 10

Goal: Certifying maintenance personnel to support safety Manager with first-call Maintenance

Duration: 4 days

Target audience: Maintenance personnel

Program:

- Safety concept of Safety Manager.
- Safety and availability considerations during maintenance activities.
- Complete overview of the system hardware.
- Detailed explanation of relevant modules.
- Explanation of Functional Logic Diagrams (FLD).
- Diagnostic aspects of Safety Manager, using a Safety Station.
- Faultfinding and fixing.

Safety Solutions training includes Safety Manager, FSC and IEC 61508 training

Safety Manager Training Schedule - continue

Safety Manager Implementation course (4551) – 4 days

From Tuesday till Friday – schedule 2006 location: The Netherlands

>> January 24 to 27

>> May 9 to 12

>> September 5 to 8

>> November 14 to 17

Goal: Certifying engineers to implement a Safety Manager project

Duration: 4 days

Target Audience: Engineering personnel

Program:

- Safety concept of Safety Manager.
- Safety Manager architectures.
- Safety and availability considerations related to implementation.
- Creating applications using Safety Builder software.
- Safety Manager online environment.
- Safety Manager communication solutions including Experion PKS.
- Online modifications

All Safety Solutions training are also available on request at other Honeywell locations or at customers sides.

Safety Manager Training Schedule – continue

Safety Manager Operator course (4552) – 1 day

On Wednesday – schedule 2006 location: The Netherlands

>> February 1

>> May 17

>> September 13

>> November 22

Goal: Certifying operator personnel to monitor and control the process via Safety Manager.

Duration: 1 day

Target Audience: Operator personnel

Program:

- General overview of Safety Manager and its functions.
- Alarm and diagnostic aspects of Safety Manager, including the online environment.
- Distributed Control System (DCS) alarm and diagnostic aspects related to Safety Manager.

Safety Manager Overview course (4553) – 1 day

On Thursdays – schedule 2006

>> February 2

>> May 18

>> September 14

>> November 23

Goal: Enabling employees to get an overview of Safety Manager

Duration: 1 day

Target Audience: Employees from the process industry who are interested in Safety Manager

Program:

- Explanation of the safety concept of Safety Manager
- Explanation of the different architectures of Safety Manager
- Overview of the hardware of Safety Manager
- Overview of the software of Safety Manager
- Explanation of the features and functions of Safety Manager

IEC 61508 Training Schedule

Introduction IEC 61508 (4504) – 1 day

On request only.

Overview

This one-day safety seminar provides an introduction to the new international safety standard IEC 61508, and helps you answer a number of important safety questions

Prerequisites

Knowledge of process control.

Course content

Many companies are currently working to implement the emerging international safety standard IEC 61508. The HSMS Safety Consultancy group helps engineering contractors, system integrators and end-users in the process industry adopt this standard and implement its requirements in a structured manner.

This one-day safety seminar provides an introduction to the new international safety standard IEC 61508, and helps you answer the following important safety questions:

1. What are the potential hazardous events and their associated risks, and what risk reduction is required to achieve an acceptably safe process installation?
2. How can it be established and confirmed that the chosen safeguarding measures/equipment realize the required risk reduction (e.g. realize a specific SIL level)?
3. What activities need to be carried out to guarantee that this SIL level is maintained during the entire lifetime of the safeguarded process installation?

IEC 61508 Training Schedule - continue

TÜV Functional Safety Program IEC 61508 (4503) – 4 days

From Monday till Thursday location: The Netherlands

>> March 13 to 16, 2006

>> September 18 to 21, 2006

>> on request

Overview

This is a four day safety seminar. Currently, many companies are heavily involved with the implementation of the emerging international safety standard IEC 61508. HSMS Safety Consultancy helps end-users in the process industry to adopt this standard and implement its requirements in a structured manner. Roughly postulated the following aspects need to be considered to comply with IEC 61508:

1. What are the potential hazardous events and their associated risks and what risk reduction is required to achieve an acceptable safe process installation?
2. How can be established and confirmed that the chosen safeguarding measures/equipment realize the required risk reduction e.g. realize a specific safety integrity level (SIL)?
3. What activities need to be carried out to guarantee that this safety integrity level maintained during the entire lifetime of the safeguarded process installation?

IEC 61508 has specified detailed requirements on the application of electric/electronic/programmable electronic safety related systems (E/E/PES-SRS).

Prerequisites

Knowledge of process control.

Course Content

- Hazard and risk assessment methodologies
- Safety Requirements Specification / SIL Selection
- SIS design concepts
- Reliability Analysis techniques, FTA, RBD, FMEA, Markov
- SIS validation techniques
- SIS operation, maintenance and testing
- SIS-related Process Safety Management
- Safety Lifecycle Management
- Safety verification, validation, audits and assessments

First day: Introduction to IEC 61508, Industrial Process Safety and Safety Instrumented Systems.

Other days: Courses, Exercises, Case studies.

Afternoon of last day: Test exam

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