ProSafe-RS Engineering Training

Objectives: Course attendees will develop a ProSafe-RS safety project using the development tools and working methods. The objective of the course is to guide the engineers through the process. Attendees will design, implement and test a safety system.

Who should attend?
Process control engineers, process engineers, maintenance and technical support personnel.

Prerequisite knowledge:
Participants require a working knowledge of MS-Windows. It would also be beneficial for participants to have an understanding of electronics and Boolean logic and safety systems.

Programme

Day 1:
- Introduction to Safety
- Overview of the ProSafe-RS hardware and documentation
- Introduction to ProSafe-RS Workbench software used for building the projects
- Introduction to applicable standards
- Installing and configuring VnetIP drivers used for interfacing the human interface station (HIS) with the safety control station (SCS)
- Configuring the address of the processor modules
- Configuring input/output (I/O) modules for redundancy

Day 2:
- Using function block logic Interpreting common alarm messages
- Using the Sequence of Event Viewer to identify process and system interactions, alarms and events
- Security levels and available measures for restricting access to components of the project
- Considering the safety aspects of a project
- Work flow in a safety project
- Specification of the project design

Duration: 5 days

Day 3:
- Creation of the ProSafe-RS project in Workbench
- Defining the project variables and the I/O modules to be used in the project
- Configuring a project; typicals and specials
- Offline/online downloading of projects to the SCS
- Using defined words in a project
- Creating and assigning variable groups
- Integrating the ProSafe-RS project with the CENTUM VP software

Day 4:
- Testing a project using Simulation Mode
- Using Debug mode to view the state of process I/O on a live project
- Using I/O lock windows for forcing inputs/outputs
- Using the import/export functionality in the Workbench software
- SCS intercommunication using link transmission
- Hardware practical exercise configuring SCS intercommunication

Day 5:
- Programming and reporting of alarms including CAMS
- Using control drawing, logic chart and sequence table viewers
- Using simulation and programme testing
- Creating and restoring project backups
- Validation exercise