SIMOCRANE Maintenance, SIMOTION/SINAMICS (CR-MAINT)

Korte beschrijving

Cranes belong to typical heavy machinery which operate in harsh environments. In many companies a critical asset in operation process and require adequate service and maintenance to avoid unplanned downtimes. With Cranes Maintenance Training (CR-MAINT) SIEMENS offers tailor-made training aimed for maintenance supervisors & technicians. In specialized training environment with real life sized motors, drives and other components as used on cranes, participants get familiar with software and hardware troubleshooting and repair of the siemens product range typically used. With a hands-on training using the SIMOCRANE Crane Management System, operational and technical status can be evaluated. Use the condition monitoring features for planning and executing preventive maintenance tasks. For details, see below.

Doelen

This practical course is guiding attendants to work on SINAMICS infeeders, inverters, motors and brakes of the actual rating as found on modern cranes.
Due to a special configuration of the training system 2 motors of original rating can be operated at full speed, voltage and current. For 1 motor typical loading will be simulated using the second motor as load simulator. A full-sized Bubenzer disk brake is installed to practice tuning of the drive for proper brake setting and - release.
Handling of infeed and inverter faults is practiced to the extend of component level repair and system recovery.
The SINAMICS infeed and inverters are controlled from a SIMATIC S7-400 via PROFIBUS just as on the real crane control system.
The SIMOCRANE Crane Management System is available on the training system.

Doelgroep

Maintenance supervisors, maintenance technicians of container terminals, ports, steel mills.
Technical personnel from crane builders and service companies involved in crane control system service and maintenance.

Inhoud

This course contents is:
- SIMATIC S7-400 and S7-300; Setup communication to the SIMATIC S7 PLC and check the proper functioning of the PLC. Restore the original program to the PLC.
- PROFIBUS communication; Troubleshooting PROFIBUS communication, understanding how PROFIBUS is working and how it is implemented on a crane.
- DRIVE-CliQ communication; Check the DRIVE-CliQ connections, use the topology in SCOUT to do this. Understand the DRIVE-CliQ rules for cranes.
- Ethetnet communication; Troubleshooting Ethernet communication, understanding how Ethernet is working and how it is implemented on a crane.
- SINAMICS control unit CU320-2
- SINAMICS infeed AIM and ALM
- SINAMICS motormodule, sensormodule, etc
- SIMOTION; Function of the module's. How to troubleshoot the modules. What to do in case of replacing a module.
- SIMOCRANE basic application; Functionality of SIMOCRANE, how to troubleshoot. How to use the software tools, STARTER tool, SCOUT, SIMATIC manager.
- SIMOCRANE - CMS (crane management system); How to use the system.
- Ground fault detection in IT network with Bender sensing module; How to use and test the Bender sensing module.
- Simulation and monitoring realistic drive loading
- Exercises and trouble shooting on the real size system
- SINAMICS failure handling and repair; Use multimeter to diagnose. Replace components. (F.I: PowerPacks, Controllers, Sensor Module)

Vereiste voorwaarden

prerequisites to this course is basic knowledge of SIMATIC S7 and cranes and drives.

Soort

Face-to-face-training

Duur

5 dagen

Taal

en

Prijs

2.570 EUR

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