CN434

Low Voltage System Drive ACS800 Application in Oil & Gas and Case Study

Course Goal

The goal of this course is to help students to understand LV drive application in metals and analysis the cause of failure.

Course Objectives

Upon completion of this course, students will be able to:

- Understand low voltage system drive
- Select suitable drive based on load
- Understand communication between ACS800 with AC800M/AC80or ACS600 with AC80(depends on used)
- Build the idea of system drive maintenance management

Student Profile

System drive engineer, system maintenance engineer, maintenance supervisor, maintenance manager.

Prerequisites and Recommendations

The student should have basic knowledge of ACS600 or ACS800, and Oil & Gas process control.

Main Topics

- Overview of manufacture characteristics in Oil & Gas
- Overview of automation in Oil & Gas
- ACS800 basic functions and application in Oil & Gas
- The drives' parameters adjustment in Oil & Gas
- The configuration of system drive (Transformers, Breaker, Drives...)
- The principle to select system drive devices
- The case study and analysis the cause of failure (system related, communication related, technology related, etc.)
- Drive systematic maintenance and management.

Course Type

This is an instructor led course with interactive classroom discussions and associated lab exercises.

Course Duration

The duration is 5 days

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CN464 Programming AC800M with Drives in Oil & Gas

Course Goal

The goal of this course is to teach the students Programming controller AC800M with Drives in the Oil & Gas.

Course Objectives

Upon completion of this course, students will be able to:

- Understand the construction and components of controller AC800M
- Explore and Create objects and aspects
- Configure AC800M hardware and I/O
- IEC 61131-3 programming language
- Set up OPC connection
- Understand Drive application program
- Backup and restore.

Student Profile

System engineer, system maintenance engineer, System control engineer

Prerequisites and Recommendations

The student shall to have basic knowledge of using PC

Main Topics

- Overview of control system 800xA
- AC800M hardware and I/O
- Software and programming language
- Project structure
- Control Builder and Process Portal
- Programs
- Control Modules
- OPC Connectivity
- Drives application program and communication
- Operator interface
- Backup and restore

Course Type

This is an instructor led course with interactive classroom discussions and associated lab exercises.

Course Duration

The duration is 5 days

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CN471 System MV Drive ACS1000 Application and Case Study

Course goal

The goal of this course is to help students to understand process control and the drive units application and analysis the cause of failure.

Learning objectives

Upon completion of this course the participants will be able to:

- Understand the function of process and drive control
- Understand system MV drives application in chemical and etc. industries
- Build the idea of system MV drive maintenance management
- Understand the method of system MV drive maintenance

Participant profile

System drive engineer, system maintenance engineer, maintenance supervisor, maintenance manager.

Prerequisites

The student should have basic control and MV drives and control knowledge

Topics

- Medium voltage safety requirement
- Function between process control and drive units
- MV Drive ACS1000 application in chemical and etc. industries
- The configuration of system MV drive (Transformers, Breaker, MV Drives...)
- Control section and communication with MV Drive ACS1000
- The case study and analysis the cause of failure (system related, communication related, technology related, etc.)
- MV Drive systematic maintenance and management.

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises.

Duration

The duration is 5 days

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CN479 System MV Drive ACS6000 Application in Chemical and Case Study

Course goal

The goal of this course is to help students to understand process control and the drive units ACS6000 application and analysis the cause of failure.

Learning objectives

Upon completion of this course the participants will be able to:

- Understand the function of process and drive control
- Understand system MV drives application in chemical and etc. industries
- Build the idea of system MV drive maintenance management
- Understand the method of system MV drive maintenance

Participant profile

System drive engineer, system maintenance engineer, maintenance supervisor, maintenance manager.

Prerequisites

The student should have basic control and MV drives and control knowledge

Topics

- Medium voltage safety requirement
- Function between process control and drive units
- MV Drive ACS6000 application in chemical and etc. industries
- The configuration of system MV drive (Transformers, Breaker, MV Drives...)
- Control section and communication with MV Drive ACS6000
- The case study and analysis the cause of failure (system related, communication related, technology related, etc.)
- MV Drive systematic maintenance and management.

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises.

Duration

The duration is 5 days

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