COURSE DESCRIPTION

CHH629A – System 800xA
GMD Applications with Control Module

Course goal
The goal of this course is to get an introduction to the Extended Automation System 800xA with AC800M controllers and Minerals Library for gearless mill drive (GMD) applications.

Main learning objectives
The participants will be able to:

— Explain the System 800xA architecture and the function of the different components
— Describe the main components of the AC800M controller hardware
— Configure the AC800M hardware and corresponding I/Os
— Understand the basics of Control Builder M to work in library-, application- and controller-structures in order to configure and program the AC800 controller
— Design and configure application programs using a variety of IEC 61131-3 languages
— Setup the OPC connectivity to AC800M
— Navigate in the system using Plant Explorer and understand the concept of aspect directory, aspect objects and aspects
— Explain the basic functionality of graphic displays and faceplates
— Understand the purpose of Structured Data Types and Control Modules
— Use the Standard and Minerals Libraries
— Set up the historical data collection and configure trend displays
— Describe the main components of the GMD system (ring motor, lube, brake, communications)
— Understand the signal- and data flow through the GMD application (mill auxiliaries and communication links)
— Monitor and control the process objects of the GMD
— Monitor the event and alarm lists and acknowledge alarms
— Use the import/export tool
— Backup and restore the System 800xA

Participant profile
This training is targeted to engineering, planning, advanced operating, commissioning, maintenance and service personnel working in GMD areas.

Prerequisites
Participants should know the fundamentals of working with control systems, have basic knowledge of Windows XP Operating System and of technical English.

Topics
— Basic architecture of System 800xA
— System components and terminology
— AC800M controller hardware
— Basics of Control Builder M tool
— Signal- and data flow
— Overview of standard and BMI Libraries
— Plant Explorer – engineering workplace
— Operator workplace – operating
— Object selection – faceplates
— Event- and alarm handling
— Historical data collection and trend displays
— System 800xA architecture for GMD
— GMD application and system structures
— Control modules
— Monitoring and testing applications
— OPC communication
— Import/export tool
— Backup and restore of the System 800xA

Course type and methods
This is an instructor-led course with lectures, demonstrations, interactive discussions and practical exercises.

Duration
The duration is 5 days:
— 8 hours daily for face-to-face classes
— 5 hours daily for remote sessions

Remarks
This course can be delivered at our Learning Center in Switzerland, at your site or as a remote session.
## Course map

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| Time (face-to-face class) | 9:00 am – 5:00 pm | 9:00 am – 5:00 pm | 9:00 am – 5:00 pm | 9:00 am – 5:00 pm | 9:00 am – 5:00 pm |
| Time (remote session) | to be defined | to be defined | to be defined | to be defined | to be defined |

Typical course layout (time or sequence may change)