COURSE DESCRIPTION

CHH653 – System 800xA Applications for Minerals Configuration and Operation Utilizing Minerals Library

Course goal
The goal of this course is to learn the operation – standard or Visual Control (VCO) – and configuration of the Extended Automation System 800xA with AC800M controllers and the Control Builder M (CBM) tool utilizing the Minerals Library.

Main learning objectives
The participants will be able to:
- Monitor and control the BMI minerals process objects
- Navigate in the system and create new objects and aspects using Plant Explorer
- Use the standard libraries and the Minerals Library as well as create project specific libraries
- Design and configure applications using Control Diagram Editor (CDE) within CBM utilizing Minerals Library
- Customize and use the operator's workplace and its functions and operate the Minerals Library objects (standard or VCO)
- Configure process graphic displays and define navigation links
- Manage and configure events and 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 the field of minerals applications.

Prerequisites
Participants should know the fundamentals of working with control systems and have basic knowledge of the Windows XP or Windows 7 operating system, 800xA configuration and programing and technical English.

Topics
- Operating minerals process objects (standard or VCO)
- Using Control Diagram Editor (CDE) for programming applications with functions, function blocks and control modules utilizing Minerals Library
- Data types in Minerals Library (e.g. AISData, DISData, GCC_ComData, PCC_ComData, etc.)
- Application programming utilizing various BMI Library control modules (e.g. Stw, Pre-Selection, Group/SubGroup, Mot1, MotP, AIS, DIS, GrpCycleCtrl, GroupConnect_2, GroupStep, PCC_Intlk LCC, etc.)
- Utilizing and understanding various BMI Library function blocks (e.g. PCC_Connect, PCC_Threshold_AND3, etc.)
- Monitoring event and alarm lists during operation and acknowledging alarms
- Operator workplace (standard or VCO) and process graphic based on tabbed workplace (optional)
- Import/export tool (optional)
- Backup and restore of the System 800xA (optional)
- Workshop engineering

Course type and methods
This is an instructor-led course with lectures, demonstrations, interactive discussions and practical exercises. At the end of the course a workshop is done. This workshop covers larger exercises consolidating the most important items from the training which the students will need for their future work.

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.

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Course map

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Topics	Welcome, personnel introduction Course overview To get started – operating of minerals applications Overview of Minerals Library Datatypes in Minerals Library Object grouping in Minerals Library	Review day 1 Variables and data types Control Builder M and Control Diagram Editor (CDE)	Review day 2 Programing utilizing PCC interlocking More programing utilizing BMI function block and control module type Operator workplace (based on tabbed workplace)	Review day 3 Workshop: Application building utilizing Minerals Library (PCC link and PCC interlocking)	Review day 4 Workshop (continue): Application building utilizing Minerals Library (PCC link and PCC interlocking) Summary Questions and answers Evaluation Course close
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)

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