T304 System 800xA using PROFIBUS/HART
Field Device Integration with Asset Optimization

Course Description

Course Duration
The duration is 5 days.

Course Type
This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Course Goal
The goal of this course is to learn the planning, configuration and commissioning of automation solutions with PROFIBUS/HART devices in System 800xA. Another goal is the maintenance and optimization of these devices by using Asset Optimization and Calibration Management.

Student Profile
This training is targeted to application and instrumentation engineers, commissioning and maintenance personnel, service engineers and system integrators.

Prerequisites and Recommendations
Students should have attended either the Basic Configuration course T314 or the Engineering course T315 or have knowledge and experience associated with the content of these courses.

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

- Explain the fundamentals of Fieldbus technologies especially PROFIBUS/HART
- Design and plan the topology of a System 800xA with PROFIBUS/HART device
- Configure and commission HART devices out of the ABB Device Library
- Use DTM and Fieldbus Builder for parameterization, diagnostic and simulation
- Configure and commission PROFIBUS devices out of the ABB Device Library
- Use PROFIBUS data in applications for alarms, graphics etc.
- Configure HART/PROFIBUS devices not within the ABB Device Library
- Calibrate field devices based on Asset Monitors
- Use the integrated Asset Maintenance workflow with connection to CMMS
- Install the required software components, optional with Asset Optimization

Main Topics

- PROFIBUS/HART fundamentals
- System 800xA topology with PROFIBUS/HART field devices
- HART devices on Modulebus and PROFIBUS
- PROFIBUS DP slaves
- PROFIBUS PA slaves
- Devices not in ABB Device Library
- Asset Monitoring
- Calibration Management with DMS
- CMMS integration
- Installation of software extensions
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### Course Outline

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Course overview</td>
<td>• HART devices on Modulebus and PROFIBUS (cont.)</td>
<td>• PROFIBUS PA slaves (cont.)</td>
<td>• Asset Monitoring</td>
<td>• CMMS integration</td>
</tr>
<tr>
<td>• PROFIBUS/HART fundamentals</td>
<td>• PROFIBUS DP slaves</td>
<td>• Devices not in ABB Device Library</td>
<td>• Calibration Management with DMS</td>
<td>• Installation of software extensions</td>
</tr>
<tr>
<td>• System 800xA topology with PROFIBUS/HART field devices</td>
<td>• PROFIBUS PA slaves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• HART devices on Modulebus and PROFIBUS</td>
<td></td>
<td></td>
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</tbody>
</table>