G1750
ACS800 Crane Control Program (+N5050), Operation and Programming

Course Type and Description
Classroom Course

This course belongs to a learning path that may utilize blended learning. Please see the accompanying figure for possible learning paths.

Course Duration
The course duration is 2 days.

Student Profile
This course is intended for electricians, technicians, and engineers, who commission, install, operate and service ACS880 with Crane Control Program application software and sales people.

Course Goal
The goal of this course is to teach students to:

1. Understand motions of hoists, trolleys and long travels in different industrial cranes

2. Program and modify crane application by using the Drive Composer PC tool.

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

- Describe different crane types and movements
- Describe Crane Control Program features
- Describe supervision and end limit functions
- Describe M/F and anti-sway communication
- Describe anti-sway functionality
- Make settings and start-up to the Crane Control Program

Main Topics
- Crane basics and terminology
- Control and reference interfaces
- Brake control logic
- Hoist speed optimization
- Master/Follower and shaft synchro control
- Anti-sway control
- Speed match and Speed monitoring
- Maintenance counters
- Safety control
- Hands-on exercises

Prerequisites
Either course G380, G381, G3881 (or equivalent knowledge). For course names and durations, please refer to the accompanying figures of learning paths.
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<thead>
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<th>Time</th>
<th>Day 1</th>
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<th>Day 2</th>
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<tbody>
<tr>
<td>09:00</td>
<td>Course Information</td>
<td>09:00</td>
<td>Master/Follower Communication</td>
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<tr>
<td>09:15</td>
<td>ACS880 Crane Control Basics</td>
<td>10:00</td>
<td>Break</td>
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<td>10:00</td>
<td>Break</td>
<td>10:15</td>
<td>Master Follower Exercise</td>
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<td>10:15</td>
<td>Startup and Mechanical Brake Exercise</td>
<td>10:45</td>
<td>Synchro Control</td>
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<td>12:00</td>
<td>Lunch</td>
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<td>13:00</td>
<td>ACS800 Crane Control Basics Continue</td>
<td>13:00</td>
<td>Anti-Sway Control</td>
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<tr>
<td>13:30</td>
<td>Slowdown and End Limit Switch Exercises</td>
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<tr>
<td>13:45</td>
<td>Hoist Speed Optimization</td>
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<td>Anti-Sway Exercise</td>
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<td>14:15</td>
<td>Break</td>
<td>15:00</td>
<td>Maintenance Counters</td>
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<td>ACS800 Crane Control Basics continue</td>
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<td>Feedback &amp; End of the Course</td>
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<td>15:00</td>
<td>Speed Reference Handling Exercise</td>
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