**ABB University Course Description** 

## C317

# **QCS Optical Caliper Sensor Maintenance**

Learn the theory, application, maintenance and troubleshooting for the Optical Caliper Sensor and to prepare the student for certification for this sensor.



#### Course type and methods

This is an instructor led workshop with short presentations and demonstrations, extended exercises, and hands-on sessions and discussion.

#### **Student Profile**

This course is targeted to Field Services personnel who are responsible for maintenance of a Network Platform QCS system.

#### **Prerequisites**

Students should have attended the C235 Network Platform with QCS LAN, or have extensive experience working with the Smart Platform or Network Platform QCS system. ABB Students are encouraged to bring their ABB supplied laptop to class.

#### **Course objectives**

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

- Understand the theory of operation of the Optical Caliper Sensor
- Setup and Align the Optical Caliper Sensor
- Determine the appropriate applications for the Optical Caliper Sensor

- Recalibrate the Optical Caliper Sensor
- Troubleshoot typical problems with the Optical Caliper Sensor
- Tune the Optical Caliper for scanner deviations
- Make proper adjustments to the sensor for specific applications
- Calculate new grade code variables based on correlation results

#### Main topics

- Sensor Theory
- Sensor Mechanical Operation
- Sensor Electrical Operation
- Alignment and Setup
- Calibration
- Troubleshooting

### **Course duration**

The duration is 4 days.

#### **Schedule**

Link to course schedule

#### To register

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## Course outline

## Day 1

- Course Introduction
- Sensor Introduction
- Documentation
- Sensor Theory

## Day 2

- Sensor Setup
- Lab: Sensor Operation
- Sensor Electrical Operation Lab: Running Check
- Sensor Mechanical Operation

## Day 3

- Sensor Alignment
- Lab: Sensor Alignment
  - Lab: Running Check Samples
- Sensor Calibration
- Lab: Sensor Calibration

## Day 4

- Sensor Tuning
- Lab: Sensor Troubleshooting
- Final Exam
- Course Review