

# Performance Verification Packet INSTRUMENTATION TECHNICIAN

This performance verification is designed as one method to evaluate job skills and safe work habits of a participant. The performance of the participant must be evaluated by an NCCER certified evaluator, at an NCCER authorized assessment site and be approved by an NCCER accredited assessment center.

# Performance Verification Form How to fill out and file your information

#### **Participant**

- 1) Print your last name, first name, and social security number.
- 2) Print your company name, current employer, and the state where your employer's main office is located.
- 3) In the space provided for "Participant Signature," sign your name and enter the date you signed the form.

#### **Performance Evaluator**

- 1) In the space provided for "Site Code," enter the postal zip code of the location where the performance verification is being conducted.
- 2) In the column provided for "Date," enter the date the participant completed each of the tasks. This date is important because there may be times a participant does not complete a performance verification in one day.
- 3) In the space provided for "Performance Evaluator," sign your name.
- 4) In the space provided for "Date," next to your signature, list the date the participant successfully completed all of the tasks.

#### **Administrator**

- 1) In the space provided for "Administrator," sign your name. Your signature indicates that the performance evaluator is certified to conduct this performance verification and that it was conducted within the guidelines of the NCCER.
- 2) In the space provided for "Date," next to your signature, list the date that this performance verification form is being sent to the NCCER for entry into the National Registry.
- 3) In the space provided for "Accredited Assessment Center," print the name of the accredited assessment center that is conducting this performance verification.

# NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY INSTRUMENTATION TECHNICIAN

#### **Objective**

The candidate will demonstrate the ability to identify components on a loop sheet and

P&ID, calibrate selected devices, and function check an instrument loop per a data/specification sheet.

#### Scope

This Performance Verification provides a means to observe and evaluate competencies in the following areas:

- Instrument Drawings and P&IDs
- Component Calibration
- Function Test Loop

#### **Materials Required**

- Tools and instruments required to perform three-point point calibrations for seven different components
- Temperature Transmitter
- Flow Transmitter
- Level Transmitter
- Pressure Transmitter
- Control Valve
- Controller
- Recorder
- Test Loop (to function check)
- Drawings and Documents (P&Ids)
- PPE

#### **Time Required**

6 hours

#### **Tasks**

#### Instrument Drawings and Documents

- > Identify and describe selected components on a loop sheet
- Identify calibration ranges for selected components on an installation specification or data sheet.
- ➤ Identify and describe selected components for a given loop on a P&ID.

### NCCER PERFORMANCE VERIFICATION CANDIDATE SUMMARY **INSTRUMENTATION TECHNICIAN**

#### Tasks (cont'd)

- Perform a Minimum Three-Point Calibration on Selected Components to Required **Specifications** 
  - **Temperature Transmitter**
  - Flow Transmitter
  - Level Transmitter
  - **Pressure Transmitter**
  - Control Valve
  - Controller
  - Recorder
- Function Check Test Loop

  ➤ Installed per specification

  ➤ Continuity Check

  - > Simulated process condition

# NCCER PERFORMANCE EVALUATOR CHECKLIST **INSTRUMENTATION TECHNICIAN**

Date Completed	Task To Perform
1.	Instrument Drawings and Documents (P&IDs)
	Proper identification of components
	<ul> <li>Proper descriptions of components</li> </ul>
	Understood calibration range detail
	Identified site specific control loop
	• Explained control function (local, split range, DCS, EXT, etc.)
<u>_</u> 2.	Component Calibration
	<ul> <li>Proper tools</li> </ul>
	Proper calibration equipment used correctly
	Three-point calibration to specification
	Properly identified Calibration range
3.	Function Test Loop
	Verified loop to installation specifications
	Continuity check
	• Simulated condition at primary element and verified reaction at final element
	Identified type of signal
	Identified type of field devices
	Identified number of junction boxes
4.	Safety
<del></del>	• Used PPE
	Practiced good safety procedures