

## **NOTE ON PERFORMANCE TESTING**

Performance Profile Sheet(s) are included in a format that can be easily photocopied for each trainee. Performance tests are designed to measure competency in the tasks taught in each module.

Please note the number of tasks to be tested while teaching each module. Each trainee should be tested on all the tasks listed on the Performance Profile Sheet(s). Before performance testing, the instructor should brief the trainees on:

- Test objectives and criteria
- Safety precautions
- Procedures for each task to be tested

The instructor administering the performance testing should also do the following:

- Ensure that all of the needed equipment is available and operating properly.
- Set up the testing stations.
- Organize and administer the test in a way that allows for optimal performance.
- Complete the Performance Profile Sheet(s) for each trainee by assigning a pass/fail score for each listed task. Also, include the testing date for each task in the rating box.
- Monitor adherence to all safety regulations and precautions.
- Provide adequate supervision to prevent injuries.
- Take immediate and effective action to remedy any emergency.

### **Performance Testing**

If Performance Testing is done as part of the National Center for Construction Education and Research Standardized Craft Training Program, the following conditions must be met:

1. The Craft Instructor must hold valid NCCER instructor certification for the craft being tested.
2. The training must be delivered through a Accredited Training Sponsor recognized by NCCER.
3. For every module, the specific performance testing must be completed to the satisfaction of the instructor.
4. The results of the testing must be recorded on the Training Report Form 200. This form must be provided to the local Accredited Training Sponsor to be forwarded to the NCCER National Registry.



**Craft: Industrial Maintenance Mechanic**

**Module Number: 32201-07**

**Module Title: Basic Layout**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
2, 3	1. Lay out perpendicular lines from a reference line using:	
	<ul style="list-style-type: none"> <li>• Arc method</li> </ul>	
	<ul style="list-style-type: none"> <li>• 3-4-5 method</li> </ul>	

continued

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32201-07**

**Module Title: Basic Layout**



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Objective	TASK	RATING
4-9	2. Scribe the following:	
	<ul style="list-style-type: none"> <li>• Straight lines</li> </ul>	
	<ul style="list-style-type: none"> <li>• Perpendicular lines to a base line using a square</li> </ul>	
	<ul style="list-style-type: none"> <li>• Perpendicular lines to an edge using a combination square</li> </ul>	
	<ul style="list-style-type: none"> <li>• Angled lines using a combination square</li> </ul>	
	<ul style="list-style-type: none"> <li>• Angled lines using a protractor</li> </ul>	
	<ul style="list-style-type: none"> <li>• Circles using dividers</li> </ul>	
	<ul style="list-style-type: none"> <li>• Perpendicular lines from base lines using dividers</li> </ul>	
	<ul style="list-style-type: none"> <li>• Perpendicular lines from base lines using reference points</li> </ul>	
10	3. Bisect lines using dividers.	
11	4. Divide lines into equal parts.	
12	5. Divide circles into equal parts.	
13	6. Lay out equipment locations.	

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32202-07**

**Module Title: Introduction to Piping Components**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
2	1. Identify the type of piping system designated by the following:	
	• Red color-code	
	• Yellow color-code	
	• Green color-code	
	• Bright blue color-code	

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**Craft: Industrial Maintenance Mechanic**

**Module Number: 32203-07**

**Module Title: Copper and Plastic Piping Practices**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

Objective	TASK	RATING
8	1. Correctly measure the diameter of copper tubing.	
8	2. Cut and ream copper tubing using a tube cutter.	
8	3. Correctly bend copper tubing using bending tools.	
8	4. Make a swage joint in a section of copper tubing.	

continued

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**Craft: Industrial Maintenance Mechanic****Module Number: 32203-07****Module Title: Copper and Plastic Piping Practices****contren**<sup>®</sup>  
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<b>Objective</b>	<b>TASK</b>	<b>RATING</b>
8	5. Make and join single flare connections.	
8	6. Join two sections of tubing using a compression fitting.	
8	7. Cut and join two sections of plastic pipe using appropriate fittings.	

**Craft: Industrial Maintenance Mechanic**  
**Module Number: 32204-07**  
**Module Title: Introduction to Ferrous Metal Piping Practices**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
 Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
1	1. Identify types of carbon steel pipe.	
2	2. Identify pipe sizes and weights.	
4, 5, 6	3. Identify various pipe fittings.	
2	4. Use three methods for measuring pipe.	

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**Craft: Industrial Maintenance Mechanic**  
**Module Number: 32204-07**  
**Module Title: Introduction to Ferrous Metal Piping Practices**



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 Learning Series

Objective	TASK	RATING
5	5. Apply pipe dope to pipe threads.	
5	6. Apply Teflon <sup>®</sup> tape to pipe threads.	
5	7. Assemble threaded pipe to fittings.	

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32205-07**

**Module Title: Identify, Install, and Maintain Valves**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** ((1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

<b>Objective</b>	<b>TASK</b>	<b>RATING</b>
1, 2	1. Identify various types of valves and explain their purposes and installation.	
3	2. Replace a valve stem O-ring.	
4	3. Replace a bonnet gasket.	
6	4. Repack a valve.	

**Module 32206-07 has no Performance Profile Sheet;  
no performance testing is required for this module.**

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32207-07**

**Module Title: Introduction to Bearings**



TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
1	1. Identify various types of bearings.	
3	2. Identify parts of bearings.	

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32208-07**

**Module Title: Low-Pressure Steam Systems**



TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
3	1. Identify types of steam traps and components of installations.	
6	2. Diagnose specific problems on faulty steam traps, and demonstrate safety procedures and proper corrective actions.	
7	3. Identify piping distribution systems used with steam systems.	

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**Craft: Industrial Maintenance Mechanic**

**Module Number: 32209-07**

**Module Title: High-Pressure Steam Systems and Auxiliaries**



TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
1	1. Identify the components of a high-pressure steam system and its auxiliaries.	

**Craft: Industrial Maintenance Mechanic**

**Module Number: 32210-07**

**Module Title: Distillation Towers and Vessels**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

Objective	TASK	RATING
1, 2	1. Explain the proper safety procedures and correct PPE to work in confined spaces.	

**Craft: Industrial Maintenance Mechanic**  
**Module Number: 32211-07**  
**Module Title: Heaters, Furnaces, Heat Exchangers, Cooling Towers, and Fin Fans**



TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
 Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to the Training Program Sponsor.

Objective	TASK	RATING
3	1. Identify the components of heat exchangers chosen by the instructor.	



**Craft: Industrial Maintenance Mechanic**

**Module Number: 32212-07**

**Module Title: Introduction to Tube Work**



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Learning Series

TRAINEE NAME: \_\_\_\_\_

TRAINEE SOCIAL SECURITY NUMBER: \_\_\_\_\_

CLASS: \_\_\_\_\_

TRAINING PROGRAM SPONSOR: \_\_\_\_\_

INSTRUCTOR: \_\_\_\_\_

**Rating Levels:** (1) Passed: performed task (2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:** When testing for the NCCER Standardized Craft Training Program, be sure to record Performance testing results on Craft Training Report Form 200, and submit the results to Training Program Sponsor.

<b>Objective</b>	<b>TASK</b>	<b>RATING</b>
1	1. Identify rolling equipment.	
3	2. Select the tools necessary for rolling tubes.	
3	3. Identify types of plugs.	