



Performance Verification Packet

Power Generation Maintenance Mechanic

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.

Last Updated: December 2011

National Center for Construction Education and Research
13614 Progress Blvd • Alachua, FL 32615
1-888-622-3720

NCCER Performance Evaluator Checklist

Power Generation Maintenance Mechanic

PVPGMM52

- Dead blow hammer
- Various lubricants
- Various mechanical seals
- Various bearings and seals
- Various gasket materials and gasket cutting tools
- Shaft wrench

Time Required

16 hours

Objective

The candidate will demonstrate the ability to safely rig, disassemble, inspect, reassemble, and align a motor/pump assembly; remove, install and troubleshoot bearings, mechanical seals, and couplings.

Scope

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

- Rigging
- Overhauling pumps
- Removing and installing bearings
- Inspecting all pump parts
- Removing, replacing, and setting mechanical seals
- Removing, and replacing couplings
- Aligning the pump motor assembly
- Using hand and precision tools properly and safely
- Lubricate and torque coupling fasteners

Materials Required

- Rigging Hardware
 - Chain hoist
 - Ratchet –lever hoist
 - Slings (wire or synthetic)
 - Shackles (various sizes)
 - Eyebolts
 - Cribbing
- Torque wrench
- Precision tools
 - Calipers
 - Inside and outside Micrometers
 - Dial indicators
 - Parallel blocks
- Tools required for various bearing types
 - Alignment tools
 - Shim packs
 - Pinch/Pry bar

Date Completed

Task to Perform

___-___-___ 1.

Safety

- Demonstrate safe work practices
- Use PPE correctly
- Perform proper and safe rigging
- Use hand tools safely

___-___-___ 2.

Select Rigging, Inspect, and Use Rigging Equipment

- Identify and explain rigging hardware and equipment
- Inspect rigging equipment
- Choose the correct rigging and demonstrate a proper lift removing the pump from the pump skid

___-___-___ 3.

Identify, remove, and install couplings

- Identify the type of coupling being used
- Obtain the proper tools and equipment
- Inspect couplings
- Remove coupling using the mechanical pullers.
- Re-install coupling using the press fit or interference fit method.
- Torque coupling bolts in correct sequence and increments.

___-___-___ 4.

Identify, remove, and install bearings

- Remove and identify type of bearing used.
- Remove bearings correctly using bearing puller or press off.
- Inspect bearings for damage

___-___-___ 5.

Inspection

- Clean and inspect all parts
- Select the correct precision tools; perform all clearance checks
- Use micrometers correctly
- Perform a shaft run-out using dial indicators

___-___-___ 6.

Hand Tools

- Select and use the proper hand tools

___-___-___ 7. **Lubrication**

- Identify and use lubrication equipment to apply lubricants
- Read and interpret a lubrication chart.

___-___-___ 8. **Mechanical Seals**

- Identify and explain the type of mechanical seal used.
- Safely and accurately remove and inspect mechanical seals.
- Safely and accurately install/set mechanical seals

___-___-___ 9. **Align equipment using conventional, reverse, or laser alignment techniques**

- Identify and choose alignment fixtures and method of alignment.
- Perform rough alignment within .100''
- Align equipment to acceptable tolerances.

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.

Last Updated: December 23, 2011

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PERFORMANCE VERIFICATION FORM

Power Generation Maintenance Mechanic – PVPGMM52 - CRAFT

Candidate information		
_____	_____	_____
Last Name	First Name	SSN or SGN
_____	_____	_____
Employer/Company Name	State	Site Code
Evaluator		
_____	_____	_____
Last Name	First Name	SSN or SGN

Task Number	TASK	DATE (MM/DD/YY)	START TIME	END TIME
01	PPE selection (00101-09)			
02	Select, inspect, and use rigging equipment (00106-09)			
03	Identify, remove, and install couplings (32304-08)			
04	Identify, remove, and install bearings (32303-08)			
05	Inspection (32302-08)			
06	Hand tools (32102-07)			
07	Lubrication (32113-07)			
08	Mechanical Seals (32308-08)			
09	Align equipment (32306-08, 32404-09, 32405-09)			

Consent/Release: I, the undersigned, do hereby authorize NCCER to release the information and results attained through the administration of the National Craft Assessment and Certification Program (NCACP) to the organization referenced below, and acknowledge that the employer noted above is my present employer.

Accredited Assessment Center: _____

Participant: _____ **Date:** _____

Performance Evaluator: _____ **Date:** _____

Primary Administrator: _____ **Date:** _____