



# National Craft Assessment and Certification Program S P E C I F I C A T I O N S

## Power Generation Maintenance Mechanic

PGMM52

Released December 2011

### Overview

This knowledge assessment is a two-hour closed-book examination. You will be permitted to use a basic function, non-printing calculator during the examination. No extra papers, books, notes or study material are allowed in the testing area.

### NCCER Curriculum

All NCCER knowledge assessments are referenced to NCCER's curriculum modules as listed on this specification sheet. You may order modules from Pearson (800.922.0579) or from NCCER's Online Catalog at [www.nccer.org](http://www.nccer.org).

### Assessment Development

All questions are developed and approved by subject matter experts under the direction of NCCER.

### Credentials

Upon successful completion of the knowledge assessment, NCCER will send applicable credentials to the assessment center.

### Score Report and Training Prescription

Each candidate will have access to their assessment results including their overall score and recommended training.

### NCCER Registry

Knowledge assessment results are recorded in NCCER's Registry and become a part of the portable record of an individual's NCCER credentials.

### Focus Statement

A Power Generation Maintenance Mechanic must be able to safely use hand and power tools; work safely in accordance with regulatory and industry standards; perform advanced rigging and mathematical calculations; interpret construction drawings, identify, inspect, troubleshoot, maintain and replace pumps, drivers, compressors, pulverizers, gearboxes, valves, and other major mechanical equipment; prepare and assemble piping components to include threading, cutting, and joining; remove, install and troubleshoot bearings, mechanical seals, and couplings and perform machinery alignments; troubleshoot and repair equipment; and have a basic working knowledge of turbines, hydraulics, pneumatics, and motor-operated valves.

### Knowledge Assessment Contents:

Module Number	Module Name	Number of Questions
00101-09	Basic Safety	4
00106-09	Basic Rigging	4
32103-07	Fasteners and Anchors	4
32104-07	Oxyfuel Cutting	4
32105-07	Gaskets and Packing	4
32107-07	Construction Drawings	4
32108-07	Pumps and Drivers	4
32109-07	Valves	4
32112-07	Mobile and Support Equipment	4
32113-07	Lubrication	4
32302-08	Precision Measuring Tools	4
32207-08	Intro to Bearings	4
32303-08	Installing Bearings	4
32304-08	Installing Couplings	4
32308-08	Installing Mechanical Seals	4
32306-08	Conventional Alignment	4
32404-09	Reverse Alignment	4
32307-08	Installing Belt and Chain Drives	4
32204-07	Intro to Ferrous Metal Piping Practices	4
32205-07	Identify, Install and Maintain Valves	4
32208-07	Low-Pressure Steam Systems	4
32209-07	High-Pressure Steam Systems and Auxiliaries	4
32211-07	Heaters, Furnaces, Heat Exchangers, Cooling Towers, and Fin Fans	4
15401-08	Conveyors	4
15409-08	Basic Hydraulic Systems	4
15410-08	Troubleshooting and Repairing Hydraulic Systems	4
52401-10	Vibration and Balancing	4
52402-10	Fuel Preparation and Delivery Equipment	4
32403-09	Compressors and Pneumatic Systems	4
32407-09	Troubleshooting and Repairing Pumps	4
32408-09	Troubleshooting and Repairing Gearboxes	4
15505-09	Turbines	4
15506-09	Maintaining and Repairing Turbines	4
<b>Total Number of Questions</b>		<b>132</b>

The cut score for this assessment is 75.

A corresponding hands-on Performance Verification is available.