

### Power Generation Maintenance Mechanic V1 PGMM52

Updated June 2023

#### 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.

#### Overview

- Two-hour closed-book examination
- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed
- A corresponding hands-on Performance Verification is available

Minimum passing score is 75.

#### Written Assessment Contents:

Module ID	Content Domain/Module Title	Number of Items
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

#### NCCER Curriculum

All NCCER knowledge assessments are referenced to NCCER's curriculum modules as listed on this specification sheet. You may order books and modules from Pearson by visiting [nccer.org/order-books-modules](https://www.nccer.org/order-books-modules).

#### 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.

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Module ID	Content Domain/Module Title	Number of Items
32302-08	Precision Measuring Tools	4
32207-08	Introduction 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	Introduction 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
32302-08	Precision Measuring Tools	4

Total Number of Items

132