

Industrial Millwright

AEN15MLWR05

Updated February 2024

Focus Statement

A journey-level Industrial Millwright is typically someone who has at least 4 years of experience in the field. They will be able to: identify hand tools, fasteners, and equipment used in the trade and distinguish their applications; apply basic layout principles, blueprint reading, and master intermediate trade math; identify appropriate gaskets and O-rings according to their application; apply oxyfuel cutting techniques; use safe rigging practices; set baseplates and soleplates; properly use precision measuring tools; install packing and seals (including mechanical seals); remove and install bearings and couplings; fabricate shims; pre-align and install equipment; install belt and chain drives, fans, and blowers; identify conveyor parts and explain their functions; distinguish types of alignment (conventional, laser and reverse) and identify the steps that must be taken for each; identify types of pumps common to the millwright trade and distinguish their application, troubleshooting, and repairing procedures; identify types of compressors and their maintenance procedures; troubleshoot and repair gearboxes; identify turbine components and explain their functions.

Overview

- Three-hour closed-book examination
- May use a basic function, non-printing calculator
- No extra papers, books, notes or study materials are allowed

Minimum passing score is 75.

Performance Verification

A corresponding hands-on Performance Verification is available.

NCCER Curriculum

All NCCER knowledge assessments are referenced to NCCER's curriculum modules as listed on this specification sheet. This assessment is referenced to NCCER's 4th edition of the Millwright curriculum. You may order books and modules from Pearson by visiting 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 or performance verification, credentials can be viewed and printed by the individual or assessment program through their NCCER Account.

Score Report and Training Prescription

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

Written Assessment Contents:

Module ID	Content Domain/Module Title	Number of Items
15102 15104 15201 15203 15205 15302 29102	Millwright Fundamentals	24

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Written Assessment Contents:

Module ID	Content Domain/Module Title	Number of Items
15103 15209 15306	Bearings and Fasteners	10
15107 15304 15305	Packing, Seals and Gaskets	10
15207 15311 15401 15412 38102	Equipment Installation	18
15208 15402 15404 15405 15411 15508	Maintenance and Troubleshooting	26
15307 15313 15314 15406 15502 15504	Alignment	26
15407 15409 15410	Hydraulics and Pneumatics	11

Total Number of Items

125