



2024-2025

Technical Skills Assessment

Industrial Maintenance Mechanics

Results by Standard

Legend (%)		
0-50%	51-75%	76-100%

Assessment: Industrial Maintenance Mechanics	% Correct 21	% Correct 22	% Correct 23	% Correct 24
Number tested: 49	22	23	24	24-25
CONTENT STANDARD 1.0: SAFETY	77.65%	84.27%	74.32%	90.53%
Performance Standard 1.1: Shop Safety	77.65%	84.27%	74.32%	90.53%
1.1.1 Explain the idea of a safety culture and its importance to industrial maintenance.	66.67%	86.67%	81.58%	91.16%
1.1.2 Identify causes of accidents and the impact of accident costs.	100.00%	96.67%	81.58%	97.96%
1.1.4 Recognize hazard recognition and risk assessment techniques.	89.71%	90.83%	75.00%	95.41%
1.1.6 Identify equipment power sources.	79.41%	85.00%	65.79%	84.69%
1.1.7 Knowledge of lock out and tag out procedures.	67.65%	83.33%	73.68%	91.84%
1.1.8 Demonstrate safe work procedures to use around electrical hazards.	72.55%	80.00%	70.18%	85.03%
1.1.9 Demonstrate the use and care of appropriate personal protective equipment(PPE).	79.41%	85.00%	74.34%	88.78%
1.1.10 Explain the importance of hazard communications (HazCom) and Safety Data.	84.31%	91.11%	77.19%	95.92%
1.1.11 Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards,	66.67%	65.56%	71.05%	86.39%
CONTENT STANDARD 3.0: SHOP SKILLS	70.59%	82.78%	71.49%	78.91%
Performance Standard 3.1: Shop Skills	70.59%	82.78%	71.49%	78.91%
3.1.1 Apply basic mathematical principles.	69.12%	84.17%	70.39%	72.96%
3.1.9 Complete a work order.	73.53%	80.00%	73.68%	90.82%
CONTENT STANDARD 4.0: TOOLS	83.33%	90.00%	74.56%	92.86%
Performance Standard 4.1: Shop equipment	83.33%	90.00%	74.56%	92.86%
4.1.1 Demonstrate use and maintenance of basic hand and power tools	88.24%	90.83%	76.32%	92.35%
4.1.4 Demonstrate the use and care of test and safety equipment.	73.53%	88.33%	71.05%	93.88%
CONTENT STANDARD 5.0: WELDING	69.23%	75.64%	71.86%	83.99%

Assessment: Industrial Maintenance Mechanics	% Correct 21-	% Correct 22-	% Correct 23-	% Correct
Number tested: 49	22	23	24	24-25
Performance Standard 5.1: Gas Welding/Cutting	72.55%	77.41%	71.35%	82.09%
5.1.1 Set up gas welding and cutting equipment and accessories.	54.90%	74.44%	71.05%	76.87%
5.1.2 Identify personal protective equipment required for welding and cutting.	88.24%	88.89%	78.95%	94.56%
5.1.3 Demonstrate proper lighting, adjusting, and shutting down of a gas torch.	74.51%	68.89%	64.04%	74.83%
Performance Standard 5.2: Arc Welding/Cutting	61.76%	71.67%	73.03%	88.27%
5.2.5 Weld basic joints in flat, horizontal, and vertical positions.	61.76%	71.67%	73.03%	88.27%
CONTENT STANDARD 6.0: ELECTRICITY & ELECTRONICS	61.34%	79.05%	58.27%	78.72%
Performance Standard 6.1: Elements of Electricity & Electronics	61.34%	79.05%	58.27%	78.72%
6.1.8 Demonstrate knowledge of the instruments used to measure electrical circuits.	61.76%	83.33%	71.71%	85.20%
6.1.9 Know the difference between a single phase and a three phase circuit.	60.78%	73.33%	40.35%	70.07%
CONTENT STANDARD 7.0: PREVENTIVE AND PREDICTIVE MAINTENANCE	76.47%	90.00%	75.44%	86.39%
Performance Standard 7.1: Maintenance Scheduling	76.47%	90.00%	75.44%	86.39%
7.1.1 Explain the function of lubricants.	79.41%	86.67%	78.95%	77.55%
7.1.8 Perform preventive maintenance on drive components.	79.41%	86.67%	81.58%	90.82%
7.1.9 List rules for good bearing lubrication.	70.59%	96.67%	65.79%	90.82%
CONTENT STANDARD 8.0: DRIVE COMPONENTS	61.76%	70.00%	63.82%	83.84%
Performance Standard 8.1: Drive Component Installation and Maintenance	61.76%	70.00%	63.82%	83.84%
8.1.1 Identify and understand various drive component couplings.	52.94%	61.67%	63.16%	85.71%
8.1.3 Understand use of shaft alignment techniques.	62.75%	74.44%	68.42%	83.67%
8.1.4 Explain the function of gear boxes.	50.98%	72.22%	50.88%	78.91%
8.1.5 Explain the function of drive sprockets and chains.	82.35%	78.33%	73.68%	85.71%
8.1.6 Explain the function of sheaves and pulleys.	64.71%	60.00%	67.11%	87.76%
CONTENT STANDARD 9.0: BEARINGS	68.63%	83.33%	60.53%	77.55%
Performance Standard 9.1: Bearing Installation, Inspection and Repair	68.63%	83.33%	60.53%	77.55%
9.1.1 Identify various bearing types and their applications.	68.63%	83.33%	60.53%	77.55%
CONTENT STANDARD 12.0: HYDRAULIC SYSTEMS	71.90%	67.04%	72.51%	77.10%
Performance Standard 12.1: Hydraulic Component Maintenance and Repair	71.90%	67.04%	72.51%	77.10%
12.1.2 Explain the characteristics and components of a hydraulic system.	70.59%	58.33%	69.74%	64.29%
12.1.3 Identify hydraulic system components.	78.82%	70.67%	75.26%	84.49%

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12.1.4 Troubleshoot hydraulic systems.	55.88%	66.67%	68.42%	71.43%
CONTENT STANDARD 13.0: PNEUMATIC SYSTEMS	51.47%	74.17%	59.21%	79.59%
Performance Standard 13.1: Pneumatic Component Maintenance and Repair	51.47%	74.17%	59.21%	79.59%
13.1.3 Identify pneumatic system components.	54.90%	77.78%	70.18%	82.99%
13.1.5 Demonstrate pneumatic system troubleshooting procedures.	41.18%	63.33%	26.32%	69.39%
CONTENT STANDARD 14.0: RIGGING SYSTEMS	64.05%	81.85%	73.98%	86.17%
Performance Standard 14.1: Rigging	64.05%	81.85%	73.98%	86.17%
14.1.2 Find the center of gravity.	72.55%	87.78%	79.82%	89.12%
14.1.3 Identify the rigging and slings used in maintenance work.	62.75%	76.67%	76.32%	82.99%
14.1.4 Explain safety inspection procedures for rigging, ropes, and slings.	56.86%	81.11%	65.79%	86.39%