

# Work Processes Schedule

## REFRIGERATION MECHANIC (ANY INDUSTRY)

**RAPIDS: 0666N**

O\*NET/SOC: 49-9021.02

REVISION DATE: 12/2014

Demonstrate knowledge and skills for qualifying as Journeyman. Applicable Job Qualification Requirements will be used as a guide in performing tasks and demonstrating knowledge in the following areas. Actual work time must be recorded in the Work Experience Log.

### Applicable Ratings/MOS

USMC MOS 1120, 1161, 1169, 6073

USCG MK

USN MM, MMA, MMN, UT

### Related Instruction

Any trade related schools/courses totaling 576 hours. Must have Completion of an AC&R school before enrollment.

### Additional Requirement

Must have Completion of an AC&R school before enrollment.

Total Hours: **8000**

Skill	Description	Hours
<b>A</b>	<p><b>FUNDAMENTALS</b></p> <p>Demonstration of knowledge required in all areas.</p> <ol style="list-style-type: none"> <li>1. Safety Precautions Fundamentals</li> <li>2. First Aid And Rescue</li> <li>3. Quality Assurance Administration Fundamentals</li> <li>4. Quality Assurance Program Fundamentals</li> <li>5. Levels Of Control Fundamentals</li> <li>6. Hearing Conservation Program Fundamentals</li> <li>7. Hazardous Material Control And Management-(HMC&amp;M) Program Fundamentals</li> <li>8. Respiratory Protection Program Fundamentals</li> <li>9. Sight Conservation Program Fundamentals</li> <li>10. General Administration (Log, Record And File Maintenance)</li> <li>11. Technical Administration (Publications And Technical Manuals)</li> <li>12. Logistics</li> <li>13. Shop Fundamentals               <ul style="list-style-type: none"> <li>· Basic Refrigeration Theory Fundamentals · Refrigerant Handling, And Gas/Liquid Cylinder Stowage · Refrigerant Recovery Fundamentals · Basic Electrical Fundamentals · Silver Brazing Fundamentals</li> </ul> </li> </ol>	<b>500</b>
<b>B</b>	<p><b>EQUIPMENT</b></p> <p>Demonstrate safe operation and upkeep of shop equipment. The Equipment list is representative of tools and machinery typically found in the Work-Center associated with this trade.</p> <ol style="list-style-type: none"> <li>1. Hermetic Compressor Analyzer (Annie A-12)</li> <li>2. Computer Alignment Kit</li> <li>3. Dial Indicator (Alignments)</li> <li>4. Fluke Temperature Analyzer</li> <li>5. Computer (Mrms)</li> <li>6. Computer (Desk Top)</li> <li>7. Gage Manifold (Refrigerant Charging And Testing)</li> <li>8. Nitrogen Pressure Test Equipment (0-4000 Psig)</li> <li>9. Cylinders Refrigerant Recovery</li> <li>10. Electronic Charging Unit (Refrigerant)</li> <li>11. Dial-A-Charge (Refrigerant 10 Lbs.)</li> <li>12. Dial-A-Charge (Refrigerant 05 Lbs.)</li> <li>13. Drill Press</li> <li>14. Dewpoint Tester</li> <li>15. Leak Detector (Electronic)</li> <li>16. Grinder Pedestal</li> <li>17. Hoist A-Frame (Hydraulic)</li> <li>18. Fluke Multimeter</li> <li>19. Flow Meter</li> <li>20. Amp Meter</li> </ol>	<b>500</b>

	<ul style="list-style-type: none"> <li>21. Vacuum Pump</li> <li>22. Vacuum Pump (Belt Driven)</li> <li>23. Hydraulic Press (Enerpac 2 Ton)</li> <li>24. Refrigerant Recycling Unit (Total Claim)</li> <li>25. Refrigerant Recovery Unit/Pumps</li> <li>26. Yellow Jacket Fluorescent Leak Scanner Solution</li> <li>27. Load Limiting Test Kit (P/N 6694947-2)</li> <li>28. Refrigerant Acid Moisture Test Kit (Total Test)</li> <li>29. Refrigerant Oil Acid/Moisture Test Kit (Tko)</li> <li>30. Acetylene/Oxygen Brazing Kit</li> </ul>	
<b>C</b>	<p><b>INSPECT, REPAIR, MAJOR OVERHAUL OF REFRIGERATION A/C COMPRESSORS &amp; SYSTEMS</b></p> <ul style="list-style-type: none"> <li>1. Centrifugal Compressors</li> <li>2. Lithium Bromide Absorption Plants (Subs)</li> <li>3. Reciprocating Compressors</li> </ul>	1000
<b>D</b>	<p><b>INSPECT, REPAIR, &amp; TEST AIR SYSTEMS/DEHYDRATORS</b></p> <ul style="list-style-type: none"> <li>1. Air Dehydrators (Freon Type) - High Pressure (Hp)</li> <li>2. Air Dehydrators (Freon Type) - Low Pressure (Lp)</li> <li>3. Air Dehydrators (Desiccant Type) -</li> <li>4. High Pressure (Hp)</li> <li>5. Air Dehydrators (Desiccant Type) -</li> <li>6. Low Pressure (Lp)</li> </ul>	1000
<b>E</b>	<p><b>INSPECT, REPAIR, RECHARGE &amp; OVERHAUL REFRIGERATION &amp; AIR COND. SYSTEMS</b></p> <ul style="list-style-type: none"> <li>1. Beverage Dispensers</li> <li>2. Counter Top Cooling Units</li> <li>3. Drinking Water Dispensers</li> <li>4. Frozen &amp; Cold Storage Room Refrigeration Plants</li> <li>5. Ice Cream Machines</li> <li>6. Ice Machines</li> <li>7. Main Air Conditioning Plants</li> <li>8. Package Units 3, 5 &amp; 7.5 Ton</li> <li>9. Refrigerator/Freezer (Free Standing)</li> <li>10. Under-Counter Refrigerator/Freezer</li> </ul>	3000
<b>F</b>	<p><b>PERFORM BRAZING SERVICES</b></p> <ul style="list-style-type: none"> <li>1. Braze Refrigerant Piping</li> </ul>	500
<b>G</b>	<p><b>PROVIDE FLUSHING &amp; TESTING SERVICES</b></p> <ul style="list-style-type: none"> <li>1. Chiller Cleaning</li> <li>2. Condenser Cleaning</li> <li>3. Freon Flush &amp; Recovery</li> <li>4. Gas System Leak Test (N2)</li> <li>5. Inert Gas Blowdown/Blanket</li> <li>6. Provide Lithium Bromide Settling Tank (Subs)</li> <li>7. Refrigerant (Gas) Recovery (R-114)</li> <li>8. Refrigerant (Gas) Recovery (R-12/22/500/502)</li> <li>9. System Hydrostatic Test (Shop)</li> <li>10. Ventilation (Air Flow) Testing (Shop)</li> </ul>	500
<b>H</b>	<p><b>TEST, REPAIR, AND OVERHAUL AIR COMPRESSORS</b></p> <ul style="list-style-type: none"> <li>1. Low Pressure Air Compressors</li> <li>2. Medium Pressure Air Compressors</li> <li>3. High Pressure Air Compressors</li> </ul>	1000