Fact sheet

Air-conditioning and Refrigeration Mechanic

(ANZSCO: 342111)
Job description

Air-conditioning and Refrigeration Mechanics assemble, install, maintain and repair commercial and domestic air-conditioning and refrigeration systems and equipment.

Their job involves:

» establishing job requirements from drawings and specifications, and laying out installation reference points
» drilling holes, installing mounting brackets and cutting, bending and threading piping
» installing and repairing components such as compressors, motors, condensers, evaporators, switches and gauges, and copper lines for steam, gas, refrigerant, compressed air, oil and chilled water
» bolting, soldering, riveting, welding and brazing pipes to connect equipment, and checking alignment and accuracy of fit
» filling systems with gas or fluid to check for leaks
» test-operating refrigeration systems, checking mechanisms and making adjustments
» removing test gas and fluid using vacuum pumps, and filling with refrigerant
» checking and overhauling refrigeration systems, diagnosing faults and repairing and replacing defective components
» adjusting system controls and mechanisms and reassembling systems
» recording causes of malfunctioning and action taken.

The qualification relevant to this job is UEE32211 Certificate III in Air-conditioning and Refrigeration.

How will I be assessed?

Stage 1:
We will review your training and employment evidence to ensure you have:

» 6 years’ employment experience as an Air-conditioning and Refrigeration Mechanic (with no formal training) OR
» 4 years’ employment experience as an Air-conditioning and Refrigeration Mechanic (with relevant formal training*).

*‘Formal training’ is training that aligns with the national training standards in your country of training.

Your evidence must show you have worked in your occupation for at least 12 months within the last 3 years.

NOTE: Unlicensed work in Australia cannot be accepted as evidence of employment.

For more information on the documents required for Stage 1, see the Evidence Guide on our website.

Stage 2:
If you are successful in Stage 1, an assessor will assess you via a Practical Assessment and a Technical Interview.

These assessments are conducted on the same day. The assessments will be conducted in English and no interpreters are allowed.

For more information on Stage 2, see the Practical Assessment / Technical Interview Guide on our website.
What skills and knowledge do I need?

To be awarded an Offshore Technical Skills Record, you must demonstrate your skill and knowledge in a selection of the following units of competency. Each unit of competency defines a selection of knowledge and skill required in Australian workplaces.

You must demonstrate competency in **27 units**, and demonstrate competency in **2 additional elective units**. These units have been organised into 7 groups as follows:

**COMMON UNITS**
- **UEENEC001B** Maintain documentation
- **UEENEC025B** Participate in refrigeration and air conditioning work and competency development activities
- **UEENEE101A** Apply Occupational Health Safety regulations, codes and practices in the workplace
- **UEENEE107A** Use drawings, diagrams, schedules, standards, codes and specifications
- **UEENEEK142A** Apply environmentally and sustainable procedures in the energy sector

**SYSTEM OPERATION AND REFRIGERANT HANDLING**
- **UEENEEJ103A** Establish the basic operating conditions of vapour compression systems
- **UEENEEJ104A** Establish the basic operating conditions of air conditioning systems
- **UEENEEJ108A** Recover, pressure test, evacuate, charge and leak test refrigerants
- **UEENEEJ113A** Commission air conditioning and refrigeration systems

**COPPER PIPING FABRICATION**
- **UEENEEE102A** Fabricate, assemble and dismantle utilities industry components
- **UEENEEE105A** Fix and secure electrotechnology equipment
- **UEENEEE137A** Document and apply measures to control OHS risks associated with electrotechnology work
- **UEENEEJ102A** Prepare and connect refrigerant tubing and fittings
- **UEENEEJ106A** Install refrigerant pipe work, flow controls and accessories
- **UEENEEJ107A** Install air conditioning and refrigeration systems, major components and associated equipment
- **UEENEEJ110A** Select refrigerant piping, accessories and associated controls
- **UEENEEJ109A** Verify functionality and compliance of refrigeration and air conditioning installations

**SYSTEM FAULT FINDING**
- **UEENEEJ111A** Diagnose and rectify faults in air conditioning and refrigeration systems and components
- **UEENEEJ170A** Diagnose and rectify faults in air conditioning and refrigeration control systems

**ELECTRICAL FAULT FINDING**
- **UEENEEE103A** Solve problems in ELV single path circuits
- **UEENEEJ153A** Find and rectify faults in motors and associated controls in refrigeration and air conditioning systems
- **UEENEEJ194A** Solve problems in low voltage refrigeration circuits
- **UEENEEP017A** Locate and rectify faults in low voltage composite appliances using set procedures
SYSTEM FAULT FINDING
- UEEENJ111A  Diagnose and rectify faults in air conditioning and refrigeration systems and components
- UEEENJ170A  Diagnose and rectify faults in air conditioning and refrigeration control systems

ELECTRICAL DISCONNECT AND RECONNECT
- UEEENEEP012A  Disconnect/reconnect composite appliances connected to low voltage installation wiring
- UEEENEEP013A  Disconnect - reconnect control devices connected to low voltage installation wiring
- UEEENEEP024A  Attach cords and plugs to electrical equipment for connection to a single phase 230 volt supply
- UEEENEEP025A  Attach cords, cables and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply

ELECTIVES
You must demonstrate skills, knowledge and experience in ONE of the following two elective groups.

INDUSTRIAL/COMMERCIAL SYSTEM FAULT FINDING
- UEEENJ120A  Resolve problems in industrial refrigeration systems
- UEEENJ167A  Resolve problems in central plant airconditioning systems

SPECIALISED COMMERCIAL SYSTEM FAULT FINDING
- UEEENJ118A  Resolve problems in post mix refrigeration systems
- UEEENJ166A  Resolve problems in dairy refrigeration systems

How do I find out more about each unit of competency?
2. Enter a unit code (e.g. UEEENEC001B) into the ‘Title or code’ search box
3. Tick the ‘Units of competency’ check box
4. Select the ‘Search’ button
5. Select the unit from the search results
6. Read the Unit of Competency information

What will I receive after the assessment?
If you successfully complete Stage 2 you will receive:
- an Offshore Technical Skills Record (OTSR) that lists the units of competency in which you have been assessed as having successfully demonstrated the required technical skills
- a migration outcome letter if the assessment is to support your visa application.

If you are unsuccessful in Stage 2 you will be receive:
- an Unsuccessful Assessment Outcome letter that lists the units of competency for which you demonstrated equivalent technical skills, and those that were not achieved.
What is an OTSR?
The OTSR is a form of skills documentation that VETASSESS issues to individuals who successfully complete the practical skills assessment in UEE32211 Certificate III in Air-conditioning and Refrigeration. The OTSR lists the technical skills demonstrated in the practical assessment and any gaps in the Australian skills or knowledge component which need to be bridged to meet the full standard, for example the Australian Wiring Rules for electrical trades.
The regulators for the Australian Electrical Industry have agreed to provide a provisional (restricted) license against the OTSR to allow applicants to work in Australia, while they complete the ‘Australian knowledge’ gap training.

What do I do with my OTSR?
Because air-conditioning and refrigeration is a licensed trade, there is another step once you have been awarded an OTSR. When you arrive in Australia, you submit your OTSR to a state/territory licensing regulator to obtain a provisional licence. This licence allows you to work under the supervision of a qualified air-conditioning and refrigeration technician so that you become familiar with specific Australian regulations relevant to the air-conditioning and refrigeration industry. You will also need to complete gap training at a registered training organisation (RTO) and work under supervision for 12 months.
Once you have successfully completed the gap training and worked for 12 months under supervision, you apply to VETASSESS to be issued with a UEE32211 Certificate III in Air-conditioning and Refrigeration.

Licensing and industry information
A licence, registration or certification may be required for this occupation.
For further information regarding any licensing requirements refer to mutual recognition for occupational licences in Australia: www.licencerecognition.gov.au
Additional industry information that may assist you can be found at the myfuture website - Australia’s national career information and exploration service, helping people to make career decisions, plan career pathways and manage work transitions: http://www.myfuture.edu.au

Where can I find more information?
If you have further questions, contact us at:

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