



OVERVIEW OF THE ROLE

As a Refrigeration Mechanic you will be part of the team which maintains and develops the Australian stations on the Antarctic continent and at Macquarie Island. You will install and maintain station domestic and commercial refrigeration plant as well as assisting with general maintenance and construction as required.

Refrigeration Mechanics generally work in summer jobs only, with the station location dependent on requirements. Winter jobs are occasionally available when required for a specific project.

WHAT YOU WILL DO ON THE JOB

As a Refrigeration Mechanic you will be required to undertake some or all of the following:

- Maintain the refrigeration plant and equipment at a station for both food storage and scientific storage.
- Manage stocks of refrigerants, ensuring that environmental standards and reporting requirements are met.
- Carry out the installation of new cool rooms (when scheduled) including the insulating panels, hardware and refrigeration system.
- Prepare and submit technical reports.
- Maintain the refrigeration stock inventories and coordinate the reorder of spare parts, materials and equipment.
- Assist with tasks in the construction and maintenance of buildings and services.

As a proactive and positive member of the community you will:

- Maintain a personal and practical commitment to AAD policies and standard operating procedures (including work, health and safety and environmental policies). Training and guidance in regard to all responsibilities relevant to your position will be provided.
- Perform duties to support the community life of the expedition, such as general kitchen duties, garbage clearance, general cleaning duties, and assisting other expedition members with official programs.
- Work in areas outside of your primary role, for example, providing assistance to other areas or science projects, or participating in general labouring tasks such as clearing snow or handling cargo.

The [General Information for Applicants](#) document contains critical information about living and working in Antarctica, and must be read in conjunction with this job description prior to applying.

Refrigeration Mechanic - Technical Criteria

These technical criteria are used to assess your application for Refrigeration Mechanic.

1. Essential

To apply for this role you must have the skills and licences listed below:

1. **Qualifications/licences** (provide copies in your application):
 - A suitable trade certificate, technical certificate, apprenticeship or recognised equivalent as a Refrigeration Mechanic.
 - A current Australian Refrigeration Council full registration and air conditioning licence.
 - A White Card (issued after May 2009).
 - A current, unrestricted "C" class (manual) Australian driver's licence.
2. Broad general experience within the refrigeration mechanic trade (usually at least five years post-apprenticeship).

2. Highly Desirable

These are not essential to the role, but they will make you more competitive against other applicants. To increase the likelihood of your application being successful, you will need to have at least some of these.

Recent hands-on experience (within the last 5 years):

- The installation and maintenance of packaged refrigeration units for -18 degrees Celsius and +4 degrees Celsius cool rooms up 20 kW.
- Maintenance of refrigeration systems for temperature controlled shipping containers.
- Maintenance of glycol chillers which employ shell and tube heat exchange and ice ball systems.
- Construction and maintenance of cool rooms using insulated panel systems and associated cool room hardware.
- Configuration and fault finding of electronic refrigeration controllers and sensors.
- Managing cylinder stocks of refrigerant gases including conducting leak testing and reclaiming refrigerants.
- Experience with R404A, R134A and R409 refrigerants and experience with upgrading from legacy refrigerants such as R12 and R22.
- Maintenance of laboratory refrigeration systems including controlled temperature cabinets.
- Maintenance of domestic heat pumps and refrigerators.
- Experience in the installation or maintenance of building heating and ventilation systems (air handling and heating/cooling water) is desirable.



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3. Additional

Should your application be successful, it is useful to have some understanding of any additional licences you have.

- Working Safely at Heights
- Confined space
- Remove non-friable asbestos
- Supervise asbestos removal
- Dogging
- Rigging
- Scaffolding
- Forklift
- Elevated work platform
- Operation of a crane
- Telescopic materials handler
- Dozer
- Loader
- Excavator
- Skid steer loader (Bobcat)



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Personal Qualities Criteria

The Australian Antarctic Division assesses individual personal qualities in terms of the attributes required to successfully live and work in an isolated Antarctic or subantarctic community. Successful candidates will meet the personal qualities criteria detailed below. Personal qualities are assessed at a later stage in the assessment process.

1. Demonstrate a strong work ethic

Evidenced by a proven history of efficient, effective, responsive and productive work performance.

Applicants for supervisory positions will be expected to demonstrate supervisory capabilities, including a good knowledge of workplace diversity, workplace relations, work, health and safety and environmental management practices and principles.

2. Demonstrate that they can make a positive contribution to community and team

Evidenced by:

- demonstrating the capacity to cope with physical and emotional isolation and the resilience to overcome hardship;
- demonstrating the capacity to work productively, contribute to the success of small isolated work groups and the overall community including recognising the effect their behaviour has on others;
- demonstrating a capacity to address and resolve issues of conflict;
- demonstrating the capacity to exercise sound judgement;
- demonstrating flexibility, tolerance and acceptance of changing circumstances;
- demonstrating qualities of robustness, motivation and confidence whilst displaying sensitivity, situational awareness and support and respect to fellow workers;
- demonstrating good social skills and taking pride in their appearance and maintaining socially accepted standards of hygiene;
- responsible use of alcohol; and
- not exhibiting behaviour that could endanger others' safety or be seen as being abusive, threatening or offensive to others.

3. Demonstrate that they can respond to authority and are compliant with the law, legislative requirements and AAD policies and procedures

Evidenced by:

- a history of complying with authority and supporting lawful instructions;
- demonstrating a commitment to and compliance with appropriate environmental management policies and practices;
- demonstrating a knowledge and history of compliance with work health and safety practices and principles; and
- recognition of harassment and discrimination issues and demonstrated compliance with associated legislative requirements.

4. Demonstrate a commitment to AAP specific requirements

Evidenced by:

- demonstrating commitment to supporting the Australian Antarctic Science Program;
- demonstrating willingness to participate in "common duties" and activities in support of the community generally; and

- demonstrating commitment to fully participate in all required training and associated activities.

Other Criteria

If you progress through the technical criteria and personal qualities stage of the process, the next stage will require you to undergo medical, psychological and character screening. Meeting and maintaining suitability in relation to these requirements is mandatory.

Medical

The AAD's Polar Medicine Unit will determine your medical fitness for duty in Antarctica or the subantarctic following tests conducted on our behalf by a nominated medical practitioner. If required, this may include comprehensive drug screening for compliance to undertake Safety Sensitive Aviation Activities (SSAA).

Candidates considered for a role at Macquarie Island may be required to complete a fitness assessment.

Psychological

You may be required to undertake an adaptability assessment.

Character

You will be subject to a police records check.

Training

You must undertake all training requirements as outlined by the AAD.

You will be required to attain the following qualifications/licences prior to commencement with the AAD:

1. A current statement of attainment in the following units of first aid:
 - Provide First Aid (HLTAID003) valid for at least 12 months beyond the date of commencement; and
 - Provide CPR (HLTAID001).



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