

POSITION DESCRIPTION

Position Title:	Mechanical Support Technician
Cluster / Business Unit / Division	Nuclear Science and Technology – Research Infrastructure Australian Centre for Neutron Scattering – Operations – Scientific Operations
Section or Unit:	Operations
Classification:	Band 3/4 (Linked)
Position Description Number:	PD-1433
Work Contract Type:	Technical
STEMM/NON-STEMM:	STEMM

POSITION PURPOSE

The primary objective of the Mechanical Support Technician is to deliver quality mechanical support services (design, assembly, installation and maintenance) within the ACNS to ensure that all Neutron Beam Instruments, instrumental systems and ancillary equipment is in safe working order, available, operated effectively and complies with relevant standards.

ORGANISATIONAL ENVIRONMENT

ANSTO leverages great science to deliver big outcomes. We partner with scientists and engineers and apply new technologies to provide real-world benefits. Our work improves human health, saves lives, builds our industries and protects the environment. ANSTO is the home of Australia's most significant landmark and national infrastructure for research. Thousands of scientists from industry and academia benefit from gaining access to state-of-the-art instruments every year.

Nuclear Science & Technology (NST) incorporates ANSTO's research, innovation, landmark research infrastructure and capabilities. NSTLI conducts research and development in relation to nuclear science and technology and connects people, transfers knowledge and provides nuclear-based products and services for the benefit of Australia.

The Research Infrastructure portfolio consists of scientific infrastructure and capabilities, with a number of them categorised as landmark infrastructure. This includes a range of scientific assets, infrastructure, capability development & delivery for multi-decadal, multi-disciplinary, multi-user research infrastructure for the user community and for internal research and development endeavours.

The Australian Centre for Neutron Scattering (ACNS) operates neutron and X-ray scattering instruments with specialised sample environment equipment utilising ANSTO's modern high flux OPAL reactor and its cold neutron source. ACNS conducts structural and functional scientific investigations for industry, health, environment, biotechnology, nanotechnology, energy, advanced materials, engineering, food and heritage / archaeology sectors. ACNS is one of the top neutron facilities worldwide and unique within the Southern Hemisphere with an internationally competitive instrument suite complemented by an extensive suite of sample environments. There is an extensive user program of >500 users (with more than 1400 visits) per year from Australian universities and institutes, international institutions and internal ANSTO researchers. ACNS also services industry needs in engineering, infrastructure, food, automotive and other sectors.

ACCOUNTABILITIES & RESPONSIBILITIES

Key Accountabilities

The key accountabilities for the Band 3 position include:

- Undertake mechanical maintenance, diagnostics, machine process operations, installation and commissioning under supervision and guidance;

- Install, commission and troubleshoot new or modified plant and equipment including assisting with equipment delivery and acceptance (which may include the writing of acceptance testing reports and procedures under supervision);
- Undertake reactive maintenance work for breakdowns in a timely and efficient manner by liaising directly with users and instrument scientists to investigate, identify and provide solutions for problems relevant to discipline;
- Escalate complex maintenance issues that cannot be resolved to relevant senior support technician, supervisor or engineer for guidance;
- Perform scheduled preventative maintenance of equipment relevant to discipline in accordance with approved procedures to contribute to the ACNS safety and reliability;
- Conduct routine inspections of equipment and report any identified issues;
- Ensure work is carried out to meet user and instrument scientist requirements and in accordance with work orders, instructions, safety rules, regulations, BMS, procedures and standards;
- Interact with the users and instrument scientists and other stakeholders to communicate job requirements and outcomes;
- Ensure maintenance and other records are prepared and updated in a timely manner and that team members and supervisor is kept informed of progress of work including development and modification of SWMES as required to ensure safe working procedures and processes are in place and adhered to;
- Contribute and actively participate in to integration scheduling meetings, toolbox talks and safety meetings;
- Undertake additional activities as required (including during periods of leave of other staff) to contribute to the ACNS and ANSTO meeting its objectives;
- Fulfil WHS responsibilities as specified in the ANSTO WHS system.

In addition to Band 3 key accountabilities, the key accountabilities for a Band 4 position include:

- Take the technical lead when receiving new plant and equipment delivery, installation and commissioning and acceptance including writing acceptance testing reports and procedures;
- Independently undertake maintenance work competently without direct supervision or instruction;
- Competence in the maintenance of more complex systems and components relevant to discipline;
- Support and contribute to the development of preventative and condition based maintenance programs;
- Use expertise and plant experience to assess and provide feedback to management on equipment performance and maintenance processes to drive improvements in equipment availability, safety and efficiency. Use independent judgement and liaise with other disciplines to understand and solve complex technical problems;
- Co-ordinate, mentor and train other technical staff on maintenance practices, processes and procedures, including work safety practices;
- Maintain relationships with clients to ensure work meets client requirements;
- Proactively liaise with radiation protection and safety advisors to produce and to review and adopt suitable work method statements on non-routine tasks and ensure appropriate documentation is completed and implemented. Review and prepare work orders and SWMES;
- Supervise contractors for high risk work (C1S) and perform the role of area supervisor by ensuring that work undertaken by contractors complies with ANSTO and the ACNS WHS and operational requirements and procedures;
- Assist Engineers and Instrument Scientists in the design and development of instrument modifications, improvements and new instruments (may require concept drafting and reviewing work in a CAD package such as solidworks);

- Take responsibility for elements of larger technical projects or small technical projects and participate in Factory Acceptance Testing (FAT);

Decision Making

- Choose the optimum method to complete all work tasks keeping in mind safety at all times.
- Suggest ways to improve all work activities and listen to the suggestions of others.
- Ensure compliance with all ACNS and ANSTO requirements.
- The levels of authority delegated to this position are those approved and issued by the Chief Executive Officer. All delegations will be in line with the ANSTO Delegation Manual AS-1682 (as amended or replaced).

Key Challenges

The major challenges for this position include:

- Developing and maintaining knowledge of systems and procedures in order to deliver quality technical services to the ACNS;
- Carry out work in accordance with operational requirements and tight deadlines to meet facility and user requirements;
- Undertaking activities in a heavily regulated environment and comply at all times with regulatory & safety requirements, codes, standards and specifications;
- Ensuring customer satisfaction and handling customer issues through applying appropriate and timely communication techniques;
- Pro-actively keeping up to date with changes to new technology and practices and maintaining knowledge and expertise with new systems that are unique and custom built;
- Troubleshooting complex equipment and systems in to minimise disruption to internal and external customers;

KEY RELATIONSHIPS

Who	Purpose
Internal	
Manager	<ul style="list-style-type: none"> • Receive guidance and direction • Provide expert, authoritative and evidence based advice
Work area team members	<ul style="list-style-type: none"> • Work closely with technicians on the deployment, repairs and maintenance of hardware. • Contribute to group decision making processes, planning and goals • Collaborate and be accountable for delivery and outcomes
ACNS Instrument Scientists, ACNS technicians & technologists, computing & electronics staff	<ul style="list-style-type: none"> • Liaise regularly with team members to discuss work activities and priorities. • Establish and maintain ongoing open communication to ensure end product meets needs and user requirements • Collaborate with computing, electrical and sample environment teams to ensure the smooth integration of all activities.
External	
Hardware vendors	<ul style="list-style-type: none"> • Work with vendors to identify and repair faults and to make improvements • Work with vendors on improving all aspects of the mechanical operations at the ACNS.
Professional societies, conference series, universities	<ul style="list-style-type: none"> • Nil

POSITION DIMENSIONS

Staff Data	
Reporting Line	Reports to the Scientific Operations Group Leader
Direct Reports	Nil
Indirect Reports	Nil

Financial Data (2021/2022)	
Revenue / Grants	Nil
Operating Budget	Nil
Staffing Budget	Nil
Capital Budget	Nil
Assets	Nil

Special / Physical Requirements	
Location:	Lucas Heights Working in different areas of designated site/campus as needed
Travel:	May be required travel to ANSTO sites from time to time Infrequent travel both internationally and nationally
Physical:	Office based physical requirements and standard mechanical technical activities in a workshop. Manual handling of various equipment and work pieces. Working in confined space environment and work at heights training is required.
Radiation areas:	Perform duties in an area where radioactive materials are handled under tightly controlled safety conditions
Hours:	Flex time is available for this role, under direction from the line manager.
Clearance requirements:	Satisfy ANSTO Security and Medical clearance requirements

Workplace Health & Safety	
Specific role/s as specified in AG-2362 of the ANSTO WHS Management System	All Workers Other specialised roles identified within the guideline a position holder may be allocated to in the course of their duties

ORGANISATIONAL CHART

Refer to published Organisational Chart.

KNOWLEDGE, SKILLS AND EXPERIENCE

The knowledge, skills and experience for the Band 3 position include:

1. Engineering – Mechanical (Fitter) or Fabrication Trade qualification
2. Relevant industrial experience in maintenance, diagnostics, installation and commissioning equipment or plant;
3. Experience working within a highly regulated industrial/operational environment;
4. Demonstrated ability to solve problems pro-actively with a demonstrated high level of self-motivation;
5. Ability to adapt to new technology and equipment;

6. Ability to prioritise and complete work to deadlines;
7. Demonstrated ability to read/interpret plans & drawings and follow instructions, procedures and policies and in accordance with safety and regulatory requirements;
8. Ability to communicate with team members, scientists and users;
9. Sound computer skills with ability to operate SAP and MS Office products to enable completion of activities;
10. Personal qualities that add value to a technical operations support team operating in a high level client service, safety & regulatory environment.

In addition to demonstrating strong knowledge, skills and experience at a Band 3 level, the Band 4 position also requires:

1. Significant experience solving technical issues associated with the maintenance of equipment or plant in a multi-disciplinary team;
2. Extensive knowledge and experience maintaining complex instruments, components, systems and ancillary equipment;
3. Demonstrated competence in undertaking maintenance, diagnostic, installation and commissioning within the ACNS.
4. Demonstrated knowledge and experience in working with the ACNS (or similar) maintenance processes, including BMS and safety procedures;
5. Demonstrated ability to conduct maintenance work safely and competently without direct supervision;
6. Demonstrated ability and experience coaching, mentoring and co-ordinating other maintenance staff and supervision of contractors;
7. Demonstrated ability to build and maintain strong customer relationships;
8. C1 contractor supervisor qualification/accreditation
9. Forklift licence and confined space & working at heights accreditation;

Linked Role Transition

Transition to the higher Band within the linked role is not automatic and ability to perform Band 4 accountabilities will need to be demonstrated and assessed. This can be done by completing the attached form and completing a full written submission demonstrating and justifying how an employee meets the transition requirements.