

Land-based Service Engineering (LBSE) 'Technician'

Occupation Description

LBSE Technicians are involved in all aspects of:

- Preparation of machinery, plant and equipment and the verification of its performance
- Installation and handover of plant and equipment to the end user
- Conducting scheduled maintenance operations, safety inspections and the compilation of machinery condition reports
- Diagnosis and repair of complex faults in machinery, plant and equipment
- Compilation of repair proposals and the implementation of timely cost effective repairs

This requires a blend of skills, knowledge, safe working and environmental practice capabilities covering, power units, power trains, fabrication, mechanical, electrical, electronic, mechatronic, hydraulic and pneumatic system applications as applicable to the chosen industry sector. The nature of the industry will present technical challenges ranging from simple mechanics to diagnosis and repair of complex mechanical, electronic, mechatronic and telemetry systems. These operations may take place in the employer's workplace or on the customer's site requiring flexible working hours as dictated by seasonal requirements. Technicians may be called upon to mentor junior colleagues and advise customers on the selection and application of machinery plant and equipment.

Typical job roles:

Land-based Service Engineering Technician's occupational title will be prefixed by the industry sector worked within e.g. Agricultural Engineering Technician, Construction & Plant Technician, Outdoor Power Equipment Technician, Forestry Equipment Technician or Fixed Plant and Equipment Technician. LBSE Technicians provide advanced technical support and guidance across a diverse range of simple and complex machinery and equipment relevant to the industry sector they work within.

Entry Requirements: Employers set the selection criteria for their apprentices. Typically this includes 4 GCSE's at Grade C or equivalent to include English, mathematics and a science subject. In addition it is desirable that the candidate has a grasp of Information and Communication Technology

Knowledge Requirements: Technicians will have the following knowledge,

- Understanding and compliance with environmental, safe working and relevant legislation, policies and practices.
- Company, client and Health & Safety procedures and their application
- How to record and communicate effectively using a range of techniques.
- The identification and correct application of tools and equipment used within the profession.
- Methods of thermally and chemically joining metals and components.
- Advanced technical and engineering principles applied in land-based engineering machinery, plant and equipment.
- The service, maintenance and repair principles and practices used to support complex machinery.
- How to access, interpret and apply technical data in the diagnosis and repair of current and emerging technology.
- How to work effectively and efficiently including accessing continual professional documentation.
- Techniques used in logical diagnosis and verification of complex machinery, plant and equipment performance.
- Emergency First Aid requirements and the Abrasive Wheels regulations

Skill Requirement: Technicians will be required to:

- Access and interpret legislative, technical data and documentation.
- Effectively communicate employing a range of methods and customer care techniques.
- Demonstrate efficient and effectively work practices both as an individual and a team member.
- Install and handover machinery, plant and equipment, test and verify its performance.
- Carry out complex diagnostics, maintenance, repairs and re-instatement of high and low technology products and verify conformity to manufacturer's specification.
- Maintain and repair power units, power trains, equipment, plant and machinery and components.
- Maintain and repair hydraulic systems and their components as appropriate to the sector.
- Maintain, interrogate and calibrate electronic equipment and systems
- Minimise machinery, plant and equipment downtime by carrying out diagnostic and preventative maintenance efficiently and effectively.

Behaviours:

Safety Orientation:	This occupation operates with high exposure levels to safety critical activities and environmental protection. There has to be compliance and a disciplined approach to identifying, mitigation and avoidance of hazards.
Strong Work Ethic:	Positive attitude, motivated by service engineering, dependable, ethical, responsible and reliable.
Logical Approach:	Able to apply a logical thought process to structuring and implementing an efficient action plan to meet customer and company expectations.
Problem Solving:	Enjoys complex problem solving, Has the aptitude to establish the root cause of the problem to prevent further re-occurrences rather than to repair the results of the problem.
Quality Focused:	Pays attention to detail and applies approved verification checks throughout work activities to ensure compliance.
Responsibility:	Motivated to succeed, accountable, and committed to completing a task.
Good Communicator:	Able to use a variety of appropriate communication methods to express and receive information accurately in a timely, factual and positive manner.
Team Player:	Able to work on own initiative but also able to interact and communicate effectively within a team applying a respectful professional manner.
Contributor to Profitability:	Continuously strives to identify and apply increased efficiency opportunities and activities.
Adaptability:	Able to adapt to change in conditions, technologies, situations and working environments.
Self-Motivation:	A motivated self-starter who wants to give their best, relishes new challenges who can work on their own initiative. Wants to stretch and drive their Continuous Professional Development.
Commitment:	Able to commit to the objectives of their employer and to the wider professional standards of the industry.

Duration: 36-48 months

Qualifications: Level 3 Diploma in Land-based Engineering, and Forklift Handling Certificate

Link to professional registration: Successful completion of this apprenticeship will be accepted by the Institution of Agricultural Engineers (IAgrE) and the Institution of Mechanical Engineers (IMechE) as the evidence required for Engineering Technician (EngTech) registration

Level: 3

Review date: After 3 years