

Land-based Service Engineering (LBSE)

Trailblazer Apprenticeship Assessment Strategy

For use in conjunction with the;

Land-based Service Engineering (LBSE) 'Technician' Level 3 Advanced 'Apprenticeship Standards

October 30th 2015

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Introduction

The Land-based Service Engineering Trailblazer Apprenticeship standards and assessment strategies have been formulated by **LE-TEC** the **L**and-based **E**ngineering **T**raining and **E**ducation **C**ommittee. This committee is industry representative and consists of; the Manufacturer's Association, the Agricultural and Garden Machinery Association and the sectors Professional Body.

LE-TEC works with Individual Employers, Training Providers, the Sector Skills Council and Awarding Organisation(s) all of whom have contributed to the formulation of the Land-based Service Industry Trailblazer Apprenticeship offerings.

LE-TEC with its access to industry experts will maintain an interest in the monitoring and verification of excellence over and above the robust independent assessment strategy outlined within this document.

This assessment strategy document is for training providers, independent assessment organisations, apprentices and employers needing guidance on how an apprentice being trained for this occupation will be assessed at the end of their training.

The Apprenticeship

Before undertaking the Land-based Service Engineering ‘Technician’ Level 3 Advanced apprenticeship the apprentice, at the discretion of the employer and awarding organisation, must first have gained the Land-based Service Engineering ‘Service Engineer’ Level 2 Apprenticeship or an equivalent

Therefore typically upon successful completion of the Land-based Service Engineering ‘Technician Level 3 Advanced Apprenticeship the apprentice will have achieved, the following;

- A work-based Level 2 Diploma in Land-based Engineering or equivalent Emergency First Aid Certificate, recommended if not previously held
- Abrasive Wheels Certificate, recommended if not previously held
- A work based Level 3 Diploma in Land-based Engineering
- Forklift truck handling certificate

The level 2 and 3 work-based diplomas in land-based engineering are embedded in the apprenticeship programme(s) and implemented through the awarding organisation(s).

Typically the Level 3 Advanced stage of the apprenticeship will be delivered in the workplace and supplemented by education blocks spread over 12-24 months or longer if the Level 2 Foundation apprenticeship has not been achieved. The duration of the apprenticeship being determined by the employer and training provider.

Although it is possible for the apprenticeship candidate to gain the level 2 and 3 work-based diplomas during the apprenticeship period the apprenticeship certificate will not be awarded until the End Point Assessment has been successfully

undertaken and passed. Successful completion of this assessment verifies work readiness and maps into Engineering Technician registration requirements.

Responsibilities of Those Involved in the Assessment Processes

The Employer:

1. To form a working relationship with the training provider ensuring a clear communication path to facilitate discussion regarding the development, progress and requirements of the apprentice
2. To provide on the job mentoring, training and development of the work ethos
3. To monitor, assess and record behaviour and performance in the workplace
4. To provide the opportunity to practice the skills and knowledge required by the apprenticeship and the level 2 and 3 diplomas in land-based engineering
5. To facilitate and participate in the exchange of information during workplace visits carried out by the training provider or their appointed representatives
6. To input information into the review of learning and behavioural evidence both during and at the end of the apprenticeship

The Training Provider:

1. To register the apprentice with the awarding organisation(s)
2. To make available the apprentice's registration details and report successful completion or failure to complete the apprenticeship to a nominated land-based industry organisation
3. To mentor and advise the employer of the requirements to fully develop the apprentice's work, academic and behavioural potential
4. To support the employer by providing the learning environment, physical and human resources, training expertise, tooling and relevant learning opportunities
5. To communicate the apprentices progress to the employer
6. To apply on programme assessment during delivery of the land-based service engineering diploma(s) as required by the awarding organisation(s)
7. To ensure their organisation employs qualified assessor(s) having land-based engineering experience supported by 30 hours of technical CPD per year
8. To ensure that one or more assessor(s) within the training organisation have completed a land-based engineering qualification specific, assessor's training workshop provided by an industry approved training provider
9. To have a rigorous internal quality assurance system
10. To provide a suitable facility, tooling and access to the resources required to stage the practical end point assessment in a controlled safe and fair environment

11. To ensure the supply of an appropriate assessment organisation from the register of apprentice assessment organisations (ROAAO). to oversee the end point assessment process

The Awarding Organisation(s)

1. To ensure that the training provider licenced to deliver their qualifications maintains the rigor and quality assurance required to deliver the qualification
2. To provide the level 2 and 3 diplomas in land-based engineering to the training provider supported by ongoing verification of best practice in delivery and assessment to meet the requirements of the Land-based Engineering industry.
3. To ensure that one or more assessor(s) within the training organisation have completed a land-based engineering qualification specific, assessor's training workshop provided by an industry approved training provider
4. To make available, review and protect the integrity of the on-programme assessments and assignment(s)
5. To provide access to an e portfolio which the candidate can complete as part of their on-programme and end point assessment requirements
6. To provide access an on-line behavioural assessment package accessible to the employer, training provider and others involved in the candidates behavioural assessment.
7. To ensure that all on-programme assessments are carried out to the same standard at the same centre, and also between different centres

The awarding organisation(s) approved verifiers employed to validate the assessment processes during the delivery of qualification(s) must have met the criteria for internal and external verification defined by the Land-based Engineering representative industry group. These include but are not limited to;

1. Competence and knowledge of assessment of land-based engineering qualifications.
2. CPD history to show an understanding of current assessment processes in land-based engineering and the areas of verification to be undertaken

3. Previous experience and competence in the role of verification (internal or external)
4. Proof of attendance at a land-based engineering verifiers training workshop delivered by a Land-based Engineering industry designated training provider

The Assessment Organisation(s)

To be on the Register of Apprentice Assessment Organisations (ROAAO).

- 1) In accordance with the industry representative group requirements to compile;
 - i. Documented procedures detailing the tasks, timings and resources required to stage and assess the end point assessments.
 - ii. Documented information on the learning outcomes to be established by the end point assessments
 - iii. A schedule of marking for each element of the end point assessments to deliver a uniform award of grading for those undertaking the end point assessment.
 - iv. An overall grading of candidate achievement ranging between, Fail, Pass, Merit to Distinction
 - v. Guidance on the good working practices to be observed and assessed during the end point assessment
- 2) To provide an independent assessment moderator to attend the end point assessment to ensure the above points i –v are used to best effect and that impartiality and best assessment practice has been applied
- 3) To provide access to an online question bank to interrogate random areas of knowledge gained during the delivery of the Work-based Level 2 and Level 3 diplomas in land-based engineering
- 4) To ensure that independent assessment moderators supplied by the assessment organisation(s) meet the required Land-based Engineering industry criteria and participate in Land-based Engineering industry approved assessor development workshops
- 5) To facilitate the independent assessment training workshops with input from the Trailblazer group and hold standardisation meetings to ensure comparability of standards between assessments at the same centre, and also between different centres

Assessment organisation(s) overseeing end point assessments must have met the criteria defined by the Land-based Engineering industry. These include but are not limited to;

1. Competence and knowledge of assessment of land-based engineering qualifications.

2. CPD history to show an understanding of land-based engineering and the areas of assessment to be undertaken
3. Previous occupational experience and competence in the role
4. Proof of attendance of the land-based engineering assessors training workshop delivered by a Land-based Engineering industry designated training provider

Overview of Assessments Undertaken During the Apprenticeship

The land-based engineering industry is fortunate in the fact that there is a tried and tested qualification structure with proven units of learning based on the Land-based Engineering National Occupational Standards. The Land-based Engineering Trailblazer Apprenticeship(s) therefore encompasses the work-based level 2 and 3 diplomas in land-based engineering and their inbuilt assessment packages.

During delivery of the Land-based Service Engineering 'Technician' Level 3 Advanced Apprenticeship continuous on-programme assessment will take place as detailed by the awarding organisation(s) and this assessment document. The assessments carried out, as part of the qualification during the apprenticeship ensure that all learning requirements have been met.

On-programme assessment methods applied

On-programme assessment will be carried out by the employer, the training provider and awarding organisation(s):

1. Knowledge outcomes periodically assessed via on-line and written tests supplied by the awarding organisation(s), marked by the provider and moderated by the awarding organisation(s). In addition assignments set and moderated by the awarding organisation(s) and marked by the provider will be completed.
2. Awarding organisation(s) specified tests will be graded, these will be considered and contribute towards the grading of the qualification within the apprenticeship.
3. Auditable workplace personal performance records detailing learning outcomes, evidence of competency and the apprentice's ability against set assignment criteria. This criteria being dictated by the work-based level 2 and 3 diplomas in land-based engineering requirements set by the awarding organisation(s)
4. The apprentice will compile a 'Portfolio' of learning evidence which will be scrutinized by the employer, and by both the training provider's internal quality assurance (IQA) and the awarding organisation(s) external quality assurance (EQA). N.B. The completed 'portfolio' will be moderated by the independent

verifier during the end point assessment and will contribute towards the overall grading of the apprenticeship.

5. Candidate performance could be further verified by periodic workplace visits conducted by the training provider
6. An assessment of the apprentice's behaviours will usually be undertaken both in the workplace and the place of learning to clearly demonstrate that behavioural criteria have been met.

Gateways to the End Point Assessment

Achievement of the Level 2 Foundation Land-based Service Engineering 'Service Engineer' apprenticeship as detailed below automatically opens the gateway for progression to the Level 3 Advanced Land-based Engineering 'Technician' Apprenticeship. Alternatively at the discretion of the employer and awarding body an equivalent qualification or Level 2 apprenticeship may be considered and accepted.

Level 2 Foundation Delivered over 18 – 24 Months	Induction into the Workplace and Training Provider Environments
	Foundation stage of learning in the workplace and educational periods with the training provider
	Successful completion of behavioural assessments at the beginning, mid-point and end of the on-programme training regime
	Continuous evaluation of learning and competence both in the workplace and at the training provider throughout delivery of the apprenticeship
	Achievement of the Emergency First Aid Certificate and Abrasive Wheels Certificate
	Completion of the work record portfolio
	Successful Completion of the Level 2 Diploma in Land-based Engineering
	Employer Confirmation of Satisfactory Workplace Performance
Gateway to the Level 2 Foundation Apprenticeship End Point Assessment	

Entry onto the Level 3 Advanced Land-based Engineering 'Technician' Apprenticeship



LEVEL 3 Advanced Delivered over 12 -24 Months	Advanced stage of learning both in the workplace and the training provider. With increasing responsibilities as constant supervision in the workplace progresses to mentoring and monitoring work tasks
	Continuous evaluation of learning and competence both in the workplace and at the training providers throughout delivery. Behavioural assessment once during the advanced stage of learning
	Achievement of Forklift Truck Handling Certificate
	Completion of the Level 3 work record portfolio
	Successful Completion of the Level 3 Diploma in Land-based Engineering
	Employer Confirmation of Satisfactory Workplace Performance
	Gateway to the Level 3 Advanced Apprenticeship End Point Assessment

N.B Successful completion of the Level 3 Diploma in Land-based Engineering together with the employer's confirmation of satisfactory workplace performance is a pre-requisite to entering the gateway to the End Point Assessment.

Employer guidance on what constitutes 'Satisfactory Work Performance' can be found in **Appendix 1** at the end of this document.

The End Point Assessments

End Point Assessment Element	Skills & Knowledge to be Assessed	Weighting
<p>Practical Assessments A Range of Tasks to be completed appropriate to the 'Technician' Level 3 Advanced Apprenticeship</p>	<p>Understanding of the task brief Preparation to perform the task(s) Observation of Health & Safety compliance Observation of best working practices Appropriate selection of tooling & equipment Practical ability The application of knowledge & skills Cleanliness and environmental awareness Retrieval and interpretation of reference data Diagnostic and verification techniques Recording and reporting abilities Reinstatement and testing on completion. Timeliness</p>	60%
<p>Written knowledge test Taken under invigilated conditions</p>	Occupational knowledge held following completion of the qualification	20%
<p>Professional Interview Oral interrogation of knowledge, Review of portfolio</p>	<p>Attitude and behaviours. Ability to communicate effectively Recall of information and depth of knowledge Achievements during the course of the apprenticeship</p>	20%

The End Point Assessment establishes how the apprentice integrates and applies the underpinning knowledge and skills gained against the Land-based Engineering Trailblazer Apprenticeship Standard. It assesses across the standard but not every aspect of the standard separately. The assessments will establish the apprentice's work readiness and competences. The End Point Assessments will take place in a controlled environment overseen by a training provider's assessor(s) and moderated by an approved (ROAAO) assessment organisation meeting the requirements detailed on page 6 to ensure an independent and unbiased assessment outcome.

The apprentice cannot achieve completion of the Land-based Engineering Apprenticeship until the End Point Assessments have been completed and a Pass, Merit or Distinction grade achieved in all elements of the assessment.

In the event of one or more of the synoptic assessment elements being failed the opportunity for one re-sit will be available. For those who pass on the resit the maximum possible apprenticeship grading achievable will be a pass.

The assessment organisation (from ROAAO) has the final say following discussion with the training provider's assessor when judging failed or borderline candidate's performance. Borderline is defined by those falling short of pass by 5% in one area of the assessments. If the candidate is borderline on more than one assessment element then a resit is mandatory. Consistency of judgements can be found on pages 11-12 of this document.

Grading of the candidate

Assessment Element	Grading Achievable	Grading Thresholds	Weighting
Practical Assessments	Fail-Pass	Pass 60%	60%
Written Knowledge Test	Fail-Pass-Merit-Distinction	Pass 60% Merit 70% Distinction 85%	20%
Professional Interview	Pass-Merit-Distinction	Pass 60% Merit 70% Distinction 85%	20%

Matrix of aggregated award grading

Practical Assessment	Written Knowledge Test	Professional Interview	Overall Grading
Pass	Pass Pass Merit	Pass Merit Pass	Pass Pass Pass
Pass	Merit Merit Distinction	Merit Distinction Merit	Merit Merit Merit
Pass	Distinction	Distinction	Distinction



The assessment organisation will provide the marking scheme that is consistent with these grading metrics

End Point Assessment Review Policy

A review of the costings, contents and procedures applied to the Land-based Service Engineering 'Service Engineer' Level 2 Foundation Apprenticeship and Level 3 Advanced Apprenticeship End Point Assessment will be undertaken after analysis of the first full year's implementation of end point assessments and will contribute to the three year review of the standard.

The review will be undertaken in conjunction with the Assessment Organisation(s) Awarding Organisations and the industry representative body.

Ensuring Independence / Impartiality

Employers and Training providers will be part of the on-programme assessment process because they are best placed to make valid judgements during the learning period.

No single party who has been involved in the employment of the apprentice or delivery of the Land-based Service Engineering Trailblazer Apprenticeship can make the sole decision on overall competence in the end point assessments.

All end point assessments will be conducted in a controlled environment to ensure impartiality.

Candidates undertaking the end point assessments will be assessed by an assessor experienced in the land-based engineering qualification relevant to the apprenticeship. In all cases the assessor will have **their judgements validated by the Assessment Organisation(s)**

By adopting this approach not only will all judgements be independent but it will also ensure a uniform approach to the assessments applied during the end point assessment. No end point assessment will rely solely on the judgement of a single individual. **In all cases the assessment organisation(s) moderator will have the final judgement.**

Establishment of the candidate's competence to practice on completion of the apprenticeship end point assessments ideally is to be established through joint agreement between the employer, training provider and assessment organisation from ROAO with the assessment organisation having the final say in the case of disagreement. The minimum participants in any element of the end point

assessment(s) and subsequent discussion being the assessment organisation and one of the other parties or their representatives.

Delivering Consistent / Accurate Judgements

Consistency of the approach used by assessors, moderators and assessment organisation(s) involved in the formative and synoptic assessment processes. This will be achieved through mandatory attendance of those involved in assessment and moderating activities at a standardisation training workshop.

The standardisation training workshop content meeting the approval of The Land-based Engineering industry representative group to ensure those involved have an understanding of; the industry, the qualification requirements embedded in the apprenticeship, the roles of the apprentice in industry and the expectation levels attached to apprenticeship performance.

Furthermore the standardisation training workshops are providing a guide to uniform assessment and moderation techniques and judgements

The end point knowledge assessment content will be approved by the Land-based Industry and developed, marked and moderated by the Assessment Organisation(s).

End point assessments will be undertaken in controlled conditions to ensure a consistent approach which can be replicated on a national basis. This approach offers the opportunity to provide a high degree of consistency and control of assessment judgements

Every effort must be made to alleviate any distractions or conflicting pressures that may impair candidate performance.

The assessment organisation(s) will ensure that standardised documented procedures are used to ensure a uniform approach by all those staging and conducting the synoptic assessments. This will include but is not limited to;

1. The scope and duration of the tasks to be undertaken
2. The resources list required e.g. consumables, tooling, PPE, reference materials, test equipment and guidelines on the mix of new to old machinery permissible for use in the end point assessment.
3. The learning outcomes to be established

4. Guidance notes on good working practice
5. A schedule of marking and grading
6. Any additional documentation deemed necessary to deliver thorough task and assessment of uniform quality
7. Written test papers
8. Professional interview scripts

Matters relating to equality of opportunity and appeals against assessment decisions will be undertaken in line with the nominated assessment organisations rules and regulations.

Quality Assurance

Quality assurance of the land-based industry apprentices assessment. Trailblazer employers are in discussion with BIS regarding quality assurance and governance arrangements; assessment organisations will need to comply with any arrangements that are approved and subsequently published.

Manageability and Affordability

The Land-based Service Engineering ‘Technician’ Level 3 Advanced Apprenticeship has been compiled to cater for a diverse range of sector activities and employer sizes. Academic learning is planned in blocks of delivery which can accommodate varying group sizes.

By embedding the established level 2 and level 3 diplomas in land-based engineering into the apprenticeship this allows training providers already engaged in delivery of the diplomas the opportunity to bid for delivery of the ‘Technician Level 3 Advanced Apprenticeship giving the possibility of regional access and availability for apprentices.

By proposing that the training provider hosts the practical end point assessment it offers the possibility to conduct the end point assessments at the end of the apprenticeship delivery timetable with minimal disruption and additional costs to the employer.

The practical Synoptic Assessment will cater for groups of between 4-6 individuals per assessment day being processed through facilities supplied by the network of training providers. It is not envisaged that this will cause any manageability issues.

In using a facility and environment known to the apprentice it will remove one layer of stress which may be present in unfamiliar surroundings. The intention is to foster a calm approach and reduce marginal failures induced by tension and nerves.

Economy of scale is also achievable by only having to set up the practical assessment arena once per training provider and processing multiples of practical assessment candidates (4 – 6) in each session facilitated by the stipulation that there is an assessor and moderator present at all practical assessments.

Cost of the End Point Assessments

The End Point Assessment Tests delivery and administration will account for approximately 20% of the apprenticeship costs. These costs and the procedures being reviewed when sufficient historical data is collected.

Uptake of the Apprenticeship

Uptake of the Land-based Service Engineering ‘Technician’ Level 3 Advanced Apprenticeship based on historical evidence is estimated to be in the region of 150 – 200 per annum.

Professional Body recognition

The Institution of Agricultural Engineers (IAgrE) have been involved and contributed to the design of this apprenticeship throughout the development process. They confirm their support of this assessment plan through letters of endorsement. IAgrE will use existing and well established quality assurance arrangements, endorsed as part of its Engineering Council licence to ensure that quality of training and assessment with regard to Engineering Technician registration is upheld

The Level 3 Land-based Engineering ‘Technician’ Advanced Apprenticeship maps into the mandatory requirements to achieve Engineering Technician registration enabling registration of the apprentice.

Whilst the Land-based Engineering Industry views Engineering Technician registration as desirable it is not a compulsory element of this apprenticeship

Appendix 1

Employer Guidance for Work Ready Sign Off. What a Good Apprentice Looks Like

Quality service delivery.

Consistently develops and delivers excellent service to customers, colleagues & advisers, supporting the products / services provided and adhering to 'Treating Customers Fairly' principles at all times

- Responds to customers, colleagues & advisers in a timely, accurate fashion, within service standards.
- Takes ownership of issues, escalating those which cannot be solved and follows through to ensure action has been taken
- Is realistic when agreeing actions, explains what can be achieved and by when. Provides regular progress updates
- Represents the values and ethics of the company.

Customer communication & relationships

Develops effective relationships with customers & contacts, handling & resolving issues through consistent accurate verbal, written and IT skills as appropriate.

- Builds rapport with customers and demonstrates empathy and understanding when dealing with them
- Delivers effectively to customers' satisfaction

Team working & collaboration

Understands role within team & impact on others. Consistently endeavours to support colleagues & collaborate to achieve results

- Is an enthusiastic and positive team member
- Shares knowledge, ideas and experiences with the wider team to assist in continuous improvement.
- Demonstrates an open and honest communication style
- Asks questions and challenges others positively

Planning & prioritising

Successfully analyses and plans in order to deliver good outcomes for the business

- Consistently prioritises time and activities accordingly, managing resources as appropriate

- Takes ownership & commits to delivery
- Flags concerns before a crisis arises, when concerned about workloads or timescales
- Using systems & Processes
- Consistently adheres to systems & processes using proficient IT skills, including risk, regulatory and governance requirements
- Consistently utilises systems accurately and appropriately

Behaviours

Honesty & integrity truthful, sincere in their actions and doing the right thing (even when not the easiest)

- Demonstrates integrity and ethical behaviour in the way they do their job
- Acts in an open and honest way

Adaptability

- Willingness to accept changing priorities and work patterns when new jobs need to be done, or requirements change
- Demonstrate a flexible approach
- Responds positively to change & shows willingness to refocus priorities when required

Enthusiasm

- Shows drive and energy in their work, when things are going well and when challenges arise
- Consistently demonstrates a positive approach to work
- Does what needs to be done to get the job done
- Suggest ways to improve how work is done

Dependability

Meets personal commitments and expectations, e.g. completing work, timekeeping and following up commitments made

- Be at work and engaged in work when required
- Take ownership in their job
- Personal commitment being proactive in their own development; commitment to the job and the business
- Takes ownership & seeks ways in which to develop own knowledge and skills within the role
- Shares knowledge and experiences with others to assist in their learning journey
- Progressively develop their own career as they learn more about the job and the business

The employer is responsible for mentoring and monitoring these attributes of the Land-based Engineering 'Technician' Apprentice when in the workplace. Auditable records are required for the review of evidence process at the end of both the Foundation and Advanced phase of the apprenticeship