Land-based Service Engineering (LBSE)

Trailblazer Apprenticeship Assessment Strategy

For use in conjunction with the;

Land-based Service Engineering (LBSE)
‘Service Engineer’
Level 2 Foundation Apprenticeship Standards

October 30th 2015
Introduction

The Land-based Service Engineering Trailblazer Apprenticeship standards and assessment strategies have been formulated by LE-TEC the Land-based Engineering Training and Education Committee. 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

Typically the Level 2 Foundation apprenticeship will be delivered in the workplace and supplemented by education blocks spread over 18 to 24 months. The duration of the apprenticeship being planned by the employer and the training provider.

Upon successful completion of the Land-based Service Engineering ‘Service Engineer’ Level 2 Foundation Apprenticeship the candidate will have achieved;

Emergency First Aid Certificate

Abrasive Wheels Certificate

A Work-based Level 2 Diploma in Land-based Engineering

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

Candidates completing the level 2 diploma in land-based engineering will not be eligible for EngTech registration. The qualification contents contain essential elements required for EngTech registration and therefore form the foundations from which to progress to professional registration.

Although it is possible for the apprenticeship candidate to gain the level 2 diploma in land-based engineering during the apprenticeship period the apprenticeship certificate will not be awarded until the end point assessment has been successfully undertaken and passed. It is successful completion of this assessment that verifies work readiness
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 accompanying level 2 diploma 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 level 2 diploma in land-based engineering 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 assessments 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 synoptic 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 relevant work-based level 2 diploma 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 level 2 diploma in land-based engineering 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. Current CPD history to show a current understanding of 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 ensure delivery of a uniform award of grading for those undertaking the end point assessments

   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 Assessments

2) To provide an independent assessment moderator to attend the end point assessments 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 end point assessment question bank to interrogate random areas of knowledge delivered during the Level 2 diploma 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

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 level 2 Foundation Land-based Engineering Trailblazer Apprenticeship therefore encompasses the work-based level 2 diploma in land-based engineering and utilises its inbuilt assessment packages.

During delivery of the Land-based Service Engineering ‘Service Engineer’ Level 2 Foundation Apprenticeship continuous on-programme assessment will take place as detailed by the awarding organisation(s) and this assessment document. The assessments carried out 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 will be 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 overall end point assessment and the grading of 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 diploma 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 will be further verified by periodic workplace visits conducted by the training provider

6. Assessment of the apprentice’s behaviours will be undertaken both in the workplace and the place of learning to clearly demonstrate that behavioural criteria have been met.

Gateway to the End Point Assessment

The apprenticeship induction and foundation stages of learning typically take place in months 1 - 12, and focus on developing the apprentice’s knowledge of, and compliance with, internal and external procedures, legislation and regulations relevant to the apprentice’s role.

Together with delivery of the underpinning knowledge, behaviour expectations, safe and best working practices, core skills and the opportunity to gain experience in the workplace.

Months 12 – 24 providing the opportunity to put the theory in practice under supervision in the workplace and the completion of the training provider education programme delivery and work record portfolio. Throughout the apprenticeship the apprentice will be subjected to continuous competence evaluation, culminating in the achievement of the Level 2 diploma in land-based engineering. The employer’s confirmation of satisfactory workplace performance after this period will complete the gateway requirements to enable the End Point Assessment Test to be undertaken.
The End Point Assessment Test

<table>
<thead>
<tr>
<th>End Point Assessment Element</th>
<th>Skills &amp; Knowledge to be Assessed</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Practical Assessments</strong></td>
<td>Understanding of the task brief</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Preparation to perform the task(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observation of Health &amp; Safety compliance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observation of best working practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Appropriate selection of tooling &amp; equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Practical ability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The application of knowledge &amp; skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cleanliness and environmental awareness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Retrieval and interpretation of reference data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recording and reporting abilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reinstatement and testing on completion. Timeliness</td>
<td></td>
</tr>
<tr>
<td><strong>Written knowledge test</strong></td>
<td>Occupational knowledge held following completion of the qualification</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Professional Interview</strong></td>
<td>Attitude and behaviours. Ability to communicate effectively</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Recall of information and depth of knowledge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Achievements during the course of the apprenticeship</td>
<td></td>
</tr>
</tbody>
</table>

The end point assessments establish how the apprentice integrates and applies the underpinning knowledge and skills gained against the Land-based Engineering Trailblazer Apprenticeship Standard. It assess 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 Trailblazer 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 end point 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**

<table>
<thead>
<tr>
<th>Assessment Element</th>
<th>Grading Achievable</th>
<th>Grading Thresholds</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Assessments</td>
<td>Fail-Pass</td>
<td>Pass 60%</td>
<td>60%</td>
</tr>
<tr>
<td>Written Knowledge Test</td>
<td>Fail-Pass-Merit-Distinction</td>
<td>Pass 60% Merit 70% Distinction 85%</td>
<td>20%</td>
</tr>
<tr>
<td>Professional Interview</td>
<td>Pass-Merit-Distinction</td>
<td>Pass 60% Merit 70% Distinction 85%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Matrix of aggregated award grading**

<table>
<thead>
<tr>
<th>Practical Assessment</th>
<th>Written Knowledge Test</th>
<th>Professional Interview</th>
<th>Overall Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td></td>
<td>Pass</td>
<td>Merit</td>
<td>Pass</td>
</tr>
<tr>
<td></td>
<td>Merit</td>
<td>Pass</td>
<td>Pass</td>
</tr>
</tbody>
</table>
The assessment organisation will provide the marking scheme that is consistent with these grading metrics

<table>
<thead>
<tr>
<th>Pass</th>
<th>Merit</th>
<th>Merit</th>
<th>Merit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Merit</td>
<td>Merit</td>
<td>Merit</td>
</tr>
<tr>
<td></td>
<td>Distinction</td>
<td>Distinction</td>
<td>Distinction</td>
</tr>
</tbody>
</table>

**End Point Assessment Test Review Policy**

A review of the costings, contents and procedures applied to the Land-based Service Engineering ‘Service Engineer’ Level 2 Foundation Apprenticeship end point assessments 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 ROAOO 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 level 2 diploma in land-based engineering 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 end point 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 assessments
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 ‘Service Engineer’ Level 2 Foundation 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 cater for varying group sizes.

Embedding an established level 2 diploma in land-based engineering in the apprenticeship allows training providers already engaged in delivery of the diploma the opportunity to bid for delivery of the ‘Service Engineer’ Level 2 Foundation 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 assessment at the end of the apprenticeship delivery timetable with minimal disruption and additional costs to the employer.

The practical end point 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 Assessments 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 ‘Service Engineer’ Level 2 Foundation Apprenticeship based on historical evidence is estimated to be in the region of 250 – 400 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. I AgrE 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 2 Land-based Engineering ‘Service Engineer’ Foundation apprenticeship contains elements of the requirements to achieve Engineering Technician registration. It however does not include all elements these can be obtained by progressing to the Level 3 Land-based Engineering ‘Technician’ Advanced 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.