L3 EPA Engineering Construction Pipefitter

A Specification Section 6 – Practice Assessments and guidance

- Knowledge Assessment
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- Practical Observation
- Guidance for setting up a practice Observation
- Technical Interview

Contacts

This specification has been designed to provide all the advice and guidance you need to prepare yourself and your apprentices for endpoint assessment. However, if you have any further questions please contact the EUIAS Help Desk using one of the following:

Help Desk email: enquiries@euias.co.uk
Help Desk telephone: 0121 713 8310

The Knowledge Test

Guidance – preparation for the Knowledge Test

While on-programme, the employer and or training provider should brief the apprentice on the areas to be assessed by the Knowledge Test, as detailed in Section 5.1. These are the selected knowledge elements of the standard: K1, K2, K3, K4, K5, K6, K7, K8, K9, S4 and B7. It is good practice to identify the areas within the learning programme where the relevant knowledge is delivered and ensuring that apprentices are aware that elements from each of these criteria might come up in the test.

The Knowledge Test is aligned to the standard rather than a specific job role that the apprentice may be doing. The questions have been written to reflect the Engineering Construction pipefitter role as a whole and are not focussed on specific plant, machinery, or employer-specific processes.

In readiness for end-point assessment, the apprentice should complete a sample test, which is included as an Annex to this specification. This should be undertaken in advance of the Knowledge Test, with enough time to mark the assessment, and provide feedback to learners.

For maximum effect, ensure the test is taken in exam conditions similar to those that will be experienced in a live test.

Practical Assessment

Guidance for setting up a Practical Assessment

The Practical Assessment focuses on one holistic pipefitting task. Briefs of comparable complexity have been developed by EUIAS. One of the briefs will be issued by EUIAS for the apprentice. The apprentice will secure the resulting pipe assembly to a rig. The rig will be provided by EUIAS.

While it is not permitted to brief the apprentice on the actual specification that will be selected for the test during the live Practical Assessment, it is permitted to set up specifications of similar complexity and duration and ask the apprentice to carry them out under live assessment conditions. To make the practice more realistic, a tutor or supervisor should adopt the role of assessor and use the appropriate grading criteria from Section 5 to 'assess' the apprentice. A sample brief for the practical assessment is included in Section 7. Also included is a document to record the results of the testing.

Each of the briefs, developed by EUIAS, focus on the tolerances and specifications as stated in an engineering drawing. The practice task brief should provide specification instructions for the apprentice to be able to:

- plan the job
- select the appropriate tools and materials
- focus on the skill
- work safely.

For example, the apprentice will be expected and must work to the tolerance and specifications as stated in an engineering drawing to fabricate, assessable, install, test and then dismantle a piping assembly consistent with a realistic working task. Note that the expectation is the task takes a

maximum of 8 hours and, therefore, must be sufficiently complex to match this duration.

The live Practical Assessment also includes questioning from the Independent Assessor. The questioning is designed to confirm the apprentice's understanding of the rationale for actions taken and choices made to complete the task. To prepare the apprentice for this aspect of the practice Practical Assessment, we recommend developing some open-ended questions which focus on the rationale for each part of the task.

The tutor or supervisor carrying out the practice assessment should record their assessment of how the apprentice performed and provide feedback to the assessor with guidance on what to do to improve their performance, taking note of the grading descriptors for pass, merit and distinction in Section 5.

Structured Professional Review

Preparing for the Structured Professional Review

The purpose of the Structured Professional Review is to allow the apprentice to demonstrate how they have met UK Spec requirements for Eng Tech and combined their skills, technical knowledge and behaviours in order to carry out their occupational role effectively and safely. The discussion will take place between the apprentice and the Independent Assessors. The review is an effective way of assessing complex topics and will allow the apprentice to showcase the depth and breadth of their understanding.

It is a good time to schedule a practice Structured Professional Review. It must be done before the live end-point assessment and with enough time to provide feedback for the apprentice to learn from. A period of two weeks or more is recommended, depending on the circumstances. The key is that the apprentice has time to act on the feedback they get at the end of the practice session.

A period of 90 minutes should be set aside for each practice Structured Professional Review, and a set of open-ended questions prepared to cover each of the areas of the standard covered by the review.

A tutor or supervisor should play the part of the assessor carrying out the review, asking the questions in a 'live test environment'. They should record their assessment of the apprentice's performance, using the grading descriptions in Section 5 as a guide, and provide the apprentice with feedback, focussing on areas of improvement.

The Structured Professional Review questioning should synoptically examine the knowledge, skills and behaviours by the apprentice through their on-programme experience. The questioning should be contextualised to the apprentice's specific job role. The tutor or supervisor must:

- prepare some interview questions around the work that the apprentice has been doing. This should be based as much as possible on evidence that has been collated for the Evidence Report.
- use various questioning techniques to confirm the depth of knowledge and or range of skills
- record the Structured Professional Review or provide a clear narrative if the interview was not recorded. The narrative must describe the apprentices' responses to the questions. The narrative must capture the depth and breadth of the apprentice's response
- ensure the apprentice has provided evidence in their responses to cover all the relevant

elements of the standard

- provide feedback to the apprentice focussing on any areas of the standard missed, or where appropriate, to give guidance on achieving the pass, merit or distinction grades.

The apprentice should be prepared to:

- complete the Evidence Report template over a 2-month period. See Section 7 for the Evidence Report template.
- submit their Evidence Report to EUIAS at least 10 days before the Structured Professional Review
- identify and expand on examples of the application of KSBs in completed pipefitting tasks in the workplace considering the ECP standard.
- demonstrate how they have met the UK Spec requirements for Eng Tech and combined their skills, technical knowledge and behaviours to carry out the occupational role effectively and safely.
- discuss evidence of their work as recorded in the Evidence Report. The report should have examples of job-related tasks so the panel can determine the role the apprentice had taken on to complete the work and understand if and how they overcame any challenges or barriers that were faced to complete the job.
- attend the Structured Professional Review which will be expected to last 90 minutes.
- provide background information about their current job role, workplace, responsibilities and discuss their apprenticeship journey with the panel.
- discuss their first selected example of evidence in the following way where the panel will be using questions to guide and discuss a typical pipefitting activity:
- Understanding and accepting the task
- Reading and extracting information from engineering drawings and designs
- Recognising and adhering to safety considerations
- Preparing the tools, equipment and work area
- Performing the task and working to specifications
- Working with others or as part of a team
- Completing the task
- Reporting the task
- Recovering tools, area and equipment.
- participate in the professional discussion and answer behavioural questions, which will be recorded on the associated review record.
- work with others and contribute to effective working relationships within an Engineering Construction environment
- communicate by keeping others informed about work plans or activities which may affect them and seek assistance from others without causing undue disruption to normal work activities