WELDING & JOINING MATTERS

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Issue 4
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Page 9

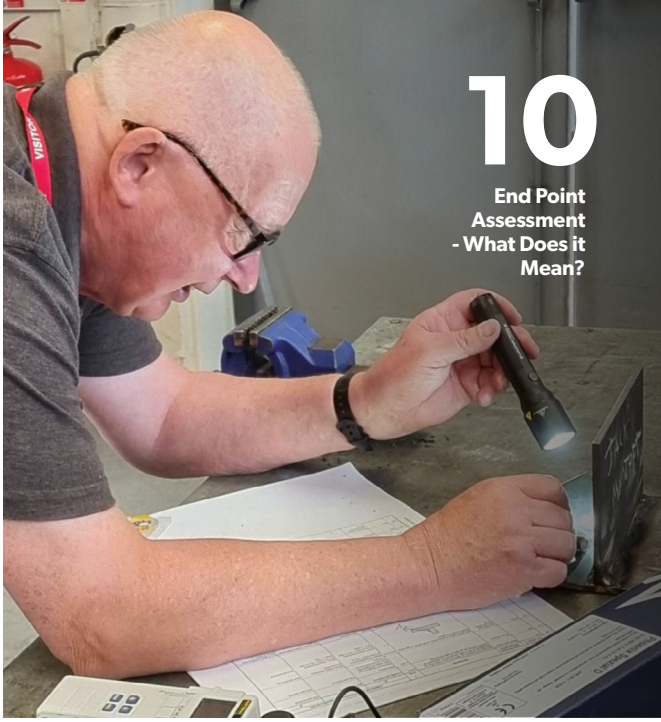
THIS ISSUE

WELDING IN THE TRANSPORTATION INDUSTRIES

INSIDE

21

Cae Study: Resolving Issues with Spot Welding of Car Bodies



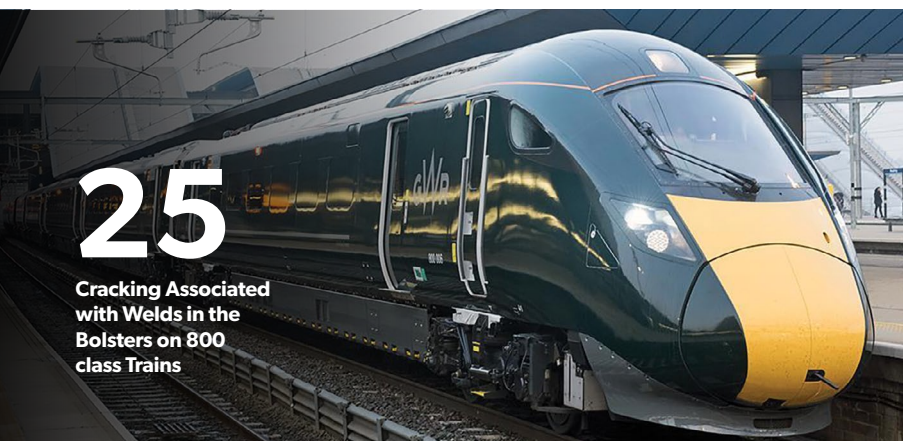
10

End Point Assessment - What Does it Mean?

CONTENTS

The Welding Institute

Issue 4 March 2023



25

Cracking Associated with Welds in the Bolsters on 800 class Trains

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On the Cover:
Jodi Jones: welding technician at Gower College.

On the cover (roundel picture):
Badge of The Institute of Welding used in the 1930s and 1940s.

END POINT ASSESSMENT – WHAT DOES IT MEAN?

By Hugh McPhillips IEng MWeldI AWS, in conversation with Simon Davies, Director of EngEPA

End-point assessment (EPA) is the final stage of an apprenticeship and it is now obligatory under the new Apprenticeship Standards. It is an impartial assessment of whether an apprentice has developed the skills, knowledge, and behaviours, as outlined in the relevant Apprenticeship Standard. The changing face of further education with the introduction of 'new' Apprenticeship Standards (as well as the 'new ' T-Levels) means that many college lecturers, employers and students, are looking for guidance on what is required to meet these standards.

APPRENTICESHIP STANDARDS

Apprenticeship Standards show what an apprentice will be doing and the skills required of them, by job role. Standards are developed by employer groups known as 'trailblazers'.

See https://www.gov.uk/guidance/search-for-apprenticeship-standards

End Point Assessment has been introduced into the new Apprenticeship Standards because employers found that qualified apprentices did not come to the job market with the full range of expected skills and knowledge.

Apprenticeship Standards were originally developed without the need for a recognised qualification. Criticism grew that employers were only training for their own limited purposes, and were therefore devaluing the existing qualifications for the trainees; which would impact them particularly if they wished to work elsewhere. To deal with, this many employers added a recognised qualification to give credibility to the apprenticeship. Examples of these include the NVQ (National Vocational Qualification) in Performing Engineering Operations and the NVQ Advanced Certificate or Diploma in Fabrication Welding Engineering, possibly coupled with practical testing to industrial standards, such as the BS EN standards for welder qualification. The inclusion of an End Point Assessment carried out by a 'Third Party' End Point Assessment Organisation (EPAO) ensures the rigour of the assessment programme, but has introduced new challenges for colleges and private training providers.

On a wet and windy evening in Torquay, I met up with Simon Davies, a Director of EngEPA, a company specialising in engineering EPAs, which is one of the few EPAOs approved by the Education and Skills Funding Agency (ESFA) and recognised by Ofqual (The Office of Qualifications and Examinations Regulation). The objective of our discussion was to provide an insight into EPA standards and his company's role in acting as a third party EPAO.

Simon, can you give us an insight to your previous experience within the industry?


Simon Davies

I have over 20 years' experience in engineering and like all my fellow directors, came through the apprenticeship route. My experience includes managing welding approval activities on behalf of a European 'Notified Inspection Body' for over 60 clients based in the UK. My direct work for clients has involved projects that included pressure vessels and heat exchangers, valve bodies and pumps, onshore and offshore pipelines, structural steelwork and corrosion resistant overlays.

In addition, I am currently acting as the Welding Co-ordinator for various fabrication companies.

Can you outline what specialisms your company covers and what services you provide to the colleges and private training providers?

EngEPA provide a professional EPA service for nine apprenticeship standards across a wide range of engineering and manufacturing areas. Extending from Gateway through to Certification, we support Training Providers, Employers and Apprentices, who are involved with the EPA process, to make the journey as straightforward as possible.

'GATEWAY' IN THE CONTEXT OF THE EPA PROCESS

Gateway is the step which takes place before an EPA can start. The employer and training has met the minimum requirements of the apprenticeship set out in the Apprenticeship Standard, and are ready to take the assessment.

See https://www.gov.uk/guidance/apprenticeship-gateway-and-resits-for-end-point-assessment-epa

Our team of experienced engineering-based assessors endeavour to ensure that those we work with receive the support they need in preparing for what will hopefully be a positive and successful EPA experience. EngEPA provide a 'one stop shop' designed to minimise administration and give the training provider and employer a single point of contact throughout the process.

All the assessors and directors understand how important easily accessible support is during the EPA process. They have extensive experience in industry and further education, working with engineering and manufacturing apprenticeships, including the development of the relevant assessment tools and working with leading awarding organisations.

EngEPA use ACE360 an industry-standard End Point Assessment management system that has been widely used to streamline the EPA process. This ensures a consistent and efficient delivery, while reducing cost and improving the quality of the assessment process for training providers, employers, and apprentices.

Support material, appropriate to the relevant Apprenticeship Standard is available once the apprentice has been registered on ACE360. We provide example portfolios, model question papers, example practical tasks, welding procedure templates, cross-referencing guides and documentation, and links to recommended resources. This is supplemented with the opportunity to have web-based support sessions with experienced assessors to ensure that all are aware and confident in the requirements of the standard.

Could you briefly explain what an End Point Assessment entails for those not familiar with the process?

At the end of their training, all apprentices must undergo an independent assessment to confirm that they have achieved occupational competence. This process is designed to give the apprentice the opportunity to demonstrate the knowledge, skills and behaviours (KSBs) set out in the Apprenticeship Standard.

This assessment effectively gives existing and any future employers confidence that the apprentice can actually perform in the occupation in which they have been trained.

At the start of the EPA process, all requirements for assessment of occupational competence are set out in an EPA plan (see below). This must be comprehensive enough to encompass all required aspects of the standard, and EngEPA work with the various parties to agree this at the beginning of the EPA process. Once agreed, this is used alongside other assessment tools (such as controlled observations, oral discussions, banks of multiple-choice questions, and professional discussion specifications) to eventually deliver the assessment.

- The apprentice must have the required level of English and Maths before starting the end point assessment.
- The Apprentice must have undertaken sufficient training to be ready to attempt the end point assessment.
- The EPA process can include review meetings and continuous on-programme assessment of knowledge, skills and behaviours.
- All parts of the end-point assessment are under the direct control of the EPAO.

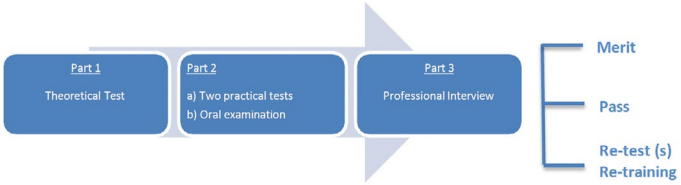

Figure 1: The EPA Process for a Level II Welding Trailblazer Standard (General Welder)

In general, the process involves the following (Figure 1):

- **Theoretical test:** conducted under exam conditions and based on the curriculum set out by the International Institute of Welding. All knowledge tests must achieve a minimum pass mark of 60%.
- **Practical tests/skills assessment:** test pieces are produced and tested to the required standard. The scope and duration of this practical test must reflect expected industrial practice. (Figure 2 and Figure 3)

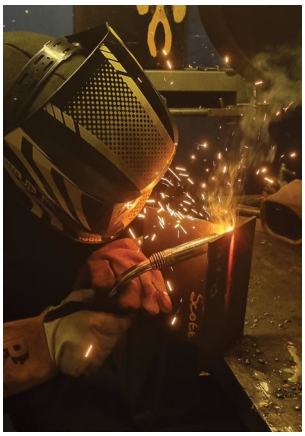

Figure 2: An apprentice MAG welding a qualification test piece. Courtesy of EngEPA

Figure 3: Keith Temperley (EngEPA assessor) reviewing a student's test piece for compliance with BS EN ISO 9606-1 Welder Qualification. Courtesy of EngEPA.

- **Oral examination:** relating to production activities, this takes place during the skills assessment.
- **Professional interview:** For Level II, this has a 30 minute duration, with questions on the technical knowledge learned during the apprenticeship, the role of the specific technical discipline in industry, and professional behaviours.

Figure 4: WEC Engineering welding academy apprentice (Charlie McKee) undergoing professional review by Keith Temperley (EngEPA assessor). Courtesy of EngEPA

Having provided this service for a number of years, you must have experienced some problems with colleges/ private training providers not being fully aware of the requirements of the EPA. Could you enlighten us on some of the problems that you and your team have come across?

The biggest problem EngEPA has encountered is the lack of support or guidance available for those training the apprentices. The EPA process is still relatively new, and all the assessment frameworks that existed before the inception of EPAs have suddenly become obsolete. In most situations the colleges or training providers have been left to read, understand, and interpret the new standards with little additional guidance.

We encourage the registration of apprentices at the very start of their EPA 'journey', and we go through the whole process with them, to maintain understanding and ensure that there are no surprises at the end. Being available and ready to respond promptly to any issues that may occur is critical to avoiding problems later. Team members in our office are available and ready to provide prompt interpretation of the standards, since they have developed many of the assessment methods.

Do you think college managements are aware of the importance of engineering to the country's economic wellbeing?

In general, the appreciation of the relevance and importance of engineering to the UK's economic well-being appears to be steadily increasing. College leaders are making a serious effort to promote engineering courses, highlighting that good engineering qualifications can lead to a wide range of exciting job opportunities in industry.

I believe that the new system of assessment, and the standards that have been developed since 2017, have provided a platform for the improvement of engineering qualifications, and for increasing the number of qualified and competently trained engineers. A recent report stated that the UK has over 70,000 engineering businesses, (equivalent to more than one in 10 or 13%, of all UK businesses), and that on average the annual economic output generated from an engineering job is estimated to be 23% higher than the average job in the UK. The value of engineering to the UK economy has probably never been higher and this is increasingly recognised in higher education.

Further information is available from:

1. www.apprenticeships.gov.uk/employers/end-point-assessments
2. https://www.instituteforapprenticeships.org/raising-the-standard-best-practice-guidance/preparation-for-end-point-assessment-raising-the-standards/
3. The EngEPA website: https://www.engepa.com