

End-point assessment plan for Print Technician apprenticeship standard

Apprenticeship standard number	Level of this Apprenticeship Standard	Integrated end-point assessment
ST0309	3	No

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Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Print Technician apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Print Technician apprentices, their employers and training providers.

Full time apprentices will typically spend 36 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices must spend a minimum of 12 months on-programme.

The EPA period should only start, and the EPA be arranged, once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

All pre-requisites for EPA assessment methods must also be complete and available for the assessor as necessary.

For level 3 apprenticeships and above, apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA.

The EPA must be completed within an EPA period lasting typically six months, after the apprentice has passed the EPA gateway.

The EPA consists of three discrete assessment methods.

The individual assessment methods will have the following grades:

Assessment method 1: Practical observation with questioning

- Fail
- Pass

Assessment method 2: Knowledge Test

- Fail
- Pass
- Distinction

Assessment method 3: Professional Discussion supported by portfolio

- Fail
- Pass
- Distinction

Performance in the EPA will determine the overall apprenticeship standard and grade of:

- Fail

- Pass
- Distinction

EPA summary table

On-programme (typically 36 months)	<ul style="list-style-type: none"> • Training to develop the occupation standard's knowledge, skills and behaviours • Working towards English and mathematics level 2, if required • Compilation of portfolio of evidence
End-point Assessment Gateway	<ul style="list-style-type: none"> • Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard • English and mathematics Level 2, as a minimum • Completed and submitted portfolio of evidence authenticated by employer
End-point Assessment (which will last a maximum of 6 months)	<p>Assessment method 1: Practical observation with questioning</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass <p>Assessment method 2: Knowledge Test</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass · Distinction <p>Assessment method 3: Professional Discussion supported by portfolio</p> <p>With the following grades:</p> <ul style="list-style-type: none"> · Fail · Pass · Distinction

Length of end-point assessment period

The EPA must be completed within an EPA period lasting typically six months, beginning when the apprentice has passed the EPA gateway.

Any supporting material required for the EPA should be submitted to the EPAO at the EPA gateway.

If an EPA assessment method is failed, it should be retaken within the EPA period and in-line with the requirements set out in this EPA plan.

Order of assessment methods

The assessment methods can be delivered in any order, allowing EPAOs flexibility in scheduling and cost-effective allocation of resources. The result of one assessment method does not need to be known before taking the next.

Gateway

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they are deemed to have achieved occupational competence. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

In addition, the apprentice must have completed the following gateway requirements prior to beginning EPA:

Achieved English and mathematics at level 2, as a minimum. For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.

For Professional Discussion (assessment method 3), the apprentice will be required to submit a portfolio of evidence. The requirements are outlined below:

- The format and structure of the portfolio of evidence needs to be agreed between the employer, the apprentice and the EPAO (for example, hard copy or on-line). However, the content must be sufficient to evidence the apprentice can apply the knowledge, skills and behaviours (KSBs) required as mapped to assessment method 3 (AM3).
- There must be at least one piece of evidence relating to each knowledge, skill and behaviour mapped to AM3. One piece of evidence can be referenced against more than one knowledge, skill or behavioural requirement. It is expected that there will be a minimum of 10 pieces (1 per KSB) and a maximum of 12 pieces of evidence. Typical evidence would be work outputs, project plans, meeting minutes, customer communication, employer feedback, witness statements, performance reports, taped evidence, maintenance records, and photographic evidence. Any employer contributions must focus on direct observation of evidence (e.g. reviews/witness statements) of competence rather than opinions. The portfolio cannot include any methods of self-assessment or self-appraisal.
- In addition all portfolios of evidence must provide:
 1. The name of the apprentice and their place of work
 2. Evidence that relates to 'real' work completed by the apprentice; evidence from simulated activities is not allowable.

3. Confirmation from the line manager that the work was completed to the required standard of the organisation.
4. Progress review documentation. The apprentice's Manager/Mentor will typically support the development of the portfolio of evidence in accordance with company policy and procedures, although the EPAO will provide further guidance on the content.

The employer and apprentice must sign off the portfolio of evidence, thereby authenticating that this is the apprentice's work and confirming the demonstration of competence against the knowledge, skills and behaviours (KSBs) across the occupational standard.

The apprentice must submit their portfolio of evidence to their EPAO when applying for the EPA¹.

¹In certain circumstances, depending on the nature of the business/department where the apprentice is employed, the evidence/documentation may not be allowed to leave the premises and/or in certain cases information in the evidence may be required to be redacted for confidentiality reasons. The EPAO and their independent assessors may also be required to sign a confidentiality/non-disclosure agreement with the apprentice's employer. In limited circumstances, the EPAO and/or their independent assessor may be required to get security clearance prior to visiting the apprentice at their employer's premises.

Assessment methods

Assessment method 1: Practical observation with questioning

Overview

This assessment method has one component – observation with questioning.

Apprentices must be observed by an independent assessor completing work in their normal workplace, in which they will be assessed against the KSBs assigned to this assessment method. The EPAO will arrange for the observation to take place, in consultation with the apprentice's employer.

The assessor may observe a maximum of one apprentice at any one time, to allow for quality and rigour.

The rationale for this assessment method is:

The print technician occupation involves significant practical activity that is best assessed through observation. A practical observation in the workplace is the most cost effective solution and it would be difficult to replicate the working environment in a valid way outside of an employer's premises. Employers would doubt the occupational competence of an individual not assessed in this way.

Delivery

The observation must take four hours. The observation may be split into discrete sections held over a maximum of one working day. The length of a working day is typically considered to be 7.5 hours. The independent assessor has the discretion to increase the time of the observation by up to 10%, to allow the apprentice to complete the task they are working on. Time allocated for questioning should fall within this 4 hour allocation.

In advance of the observation, apprentices must be provided with information on the format of the observation, including timescales.

Apprentices must complete the practical observation in their workplace as part of their normal working hours during the EPA period. This activity must be appropriate to their role.

The following must be observed during the observation:

For ALL apprentices

- Operate machine/equipment in a safe and efficient manner
- Read and interpret instructions from the job bag/work instructions
- Changeover/clean down/maintenance of machine/equipment
- Completion of relevant records
- Identify and solve problems e.g. actions taken when machine not working or potential waste exceeds company norm or electronic files received not matching specification standard

required for production of the work'. Note that this may be covered by scenario based questioning in the event that no problems arise during the observation

Set up and run equipment in accordance with company specification and standards

Plus the observation requirements for ONE option below:

For Pre-Press Technician

Receipt, checking, and processing of digital files

Use and application of business software packages

Production of plates/screens/output files and/or materials

For Press Technician

Preparing equipment to the correct order specifications and timescales as specified in the works instructions

Running equipment to the correct order specifications and timescales as specified in the works instructions

For Post-Press Technician

Preparing finishing equipment to the correct order specifications and timescales as specified in the works instructions

Running finishing equipment to the correct order specifications and timescales as specified in the works instructions

Handling and transporting materials

The practical observation must assess apprentices against the KSBs assigned to this assessment method as shown in the mapping of KSBs.

The observation should be conducted in a way that takes account of the occupational context in which the apprentice operates.

The independent assessor must be unobtrusive whilst conducting the observation.

The independent assessor must plan the timing of the observation with the apprentice's employer, taking account of workplace scheduling.

Direct observation may cover a new or existing product. Apprentices must be observed using equipment that they are familiar with, under normal working conditions. The apprentice must at a minimum be observed setting up and running the equipment in a safe and efficient manner.

Questions should be asked during natural breaks in the task. The independent assessor can ask up to 10 questions. They may ask follow up questions where clarification is required.

Activities not observed by the independent assessor during the observation can instead be covered by questioning after the observation, but these questions must be asked within the 4 hour observation window.

KSBs observed, and answers to questions, must be documented by the independent assessor.

The independent assessor will make all grading decisions.

The practical assessment will be graded fail or pass.

Independent assessors must grade the practical assessment holistically using the grading descriptors.

Other relevant information

There may be breaks during the observation to allow the apprentice to move from one location to another as required.

Support material and question development

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Marking materials

EPAOs will create open questions to assess related underpinning knowledge, skills and behaviours. They must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose.

It is optional for questions to be developed in consultation with representative employers; where they do this they must put measures in place to ensure question security. They must develop and maintain a question bank of sufficient size to prevent predictability.

Venue

The observation should take place in the employer's premises.

Assessment method 2: Knowledge Test

Overview

This assessment method has one component.

The rationale for this assessment method is to assess the apprentice's depth of understanding in the knowledge elements that may not naturally occur during the observation.

Test format

The test can be:

- computer based
- paper based

It must consist of 60 questions.

These questions will consist of:

- Closed response questions (multiple-choice questions).
- Each multiple-choice question must present the apprentice with four options, from which the apprentice must select one correct option.
- Each multiple-choice question answered correctly must be assigned one mark; any incorrect or missing answers must be assigned zero marks.
- Questions on substrates and inks may require calculations as could questions on impositions and folds.

Test administration

Apprentices must have 90 minutes to complete the test.

The test is closed book which means that the apprentice cannot refer to reference books or materials.

The following equipment is permitted during the test:

- a non-scientific calculator supplied by the EPAO.

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence, in the presence of an invigilator. The invigilator may be the independent assessor or another external person employed by the EPAO or specialised (proctor) software, if the test is taken on-line. The EPAO is required to have an invigilation policy that will set out how the test/examination is to be carried out. This will include specifying the most appropriate ratio of apprentices to invigilators to best take into account the setting and security required in administering the test/examination.

The EPAO is responsible for ensuring the security of testing they administer to ensure the test remains valid and reliable (this includes any arrangements made using online tools). The EPAO is responsible for verifying the identity of the person taking the test.

The EPAO must verify the suitability of the venue for the test.

Marking

Tests must be marked by independent assessors or markers employed by the EPAO following a marking guide produced by the EPAO. Alternatively, marking by computer is permissible where questions types allow this, to improve marking reliability.

Question and resources development

Questions must be written by EPAOs and must be relevant to the occupation and employer settings. It is recommended that this be done in consultation with employers of this occupation. EPAOs should also maintain the security and confidentiality of their questions when consulting employers.

EPAOs must develop 'question banks' of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure they, and the questions they contain, are fit for purpose.

Required supporting material

As a minimum EPAOs will produce the following material to support this method:

- A test specification
- sample tests and mark schemes
- live tests and mark schemes
- analysis reports which show areas of weakness for completed tests/exams and an invigilation policy.

Assessment method 3: Professional Discussion supported by portfolio

Overview

This assessment method has one component.

This assessment will take the form of a professional discussion supported by portfolio, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method. It will involve the questions that will focus on coverage of prior learning or activity.

Delivery

Independent assessors will conduct and assess the professional discussion.

The professional discussion must last for 90 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer.

Further time may be granted for apprentices with appropriate needs, in-line with the EPAO's Reasonable Adjustments policy.

The professional discussion will be in the format of question and answer. End-point assessment organisations will provide standardised questions. The professional discussion will have a minimum of ten questions and, if required, follow-up questions to probe for further clarification may be used. The independent assessor must combine questions from the EPAO's question bank and those generated by themselves. A minimum of five questions should be taken from the EPAO's question bank.

The professional discussion will be conducted as set out here:

The professional discussion must assess the KSBs mapped to the assessment method, taking account of the prior learning and activities outlined in the portfolio of evidence. To enable the independent assessor sufficient time to plan, apprentices must submit their portfolio of evidence to their EPAO at the EPA gateway.

An independent assessor will review the portfolio of evidence to tailor the questions to be used during the professional discussion.

The apprentice can refer to the portfolio of evidence during the professional discussion and draw on evidence within it when responding to questions. Independent assessors can also draw on the information within the portfolio of evidence to help shape their questions.

Video conferencing can be used to conduct the professional discussion, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided in some way.

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

The independent assessor will make all grading decisions.

The professional discussion will be graded fail, pass or distinction.

Independent assessors must grade the professional discussion holistically using the grading descriptors.

Venue

The professional discussion should take place in a quiet room, free from distractions and influence.

The professional discussion can take place in any of the following:

- an employer's premises
- a suitable venue selected by the EPAO (for example, a training provider's premises)

Other relevant information

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

Independent assessors must be developed and trained by the EPAO in the conduct of professional discussion and reaching consistent judgement.

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements

Marking materials

- A structured specification and question bank must be developed by EPAOs. The 'question bank' must be of sufficient size to prevent predictability and the EPAO must review it regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The specifications, including questions relating to the underpinning knowledge, skills and behaviours, must be varied yet allow assessment of the relevant KSBs.

Weighting of assessment methods

All assessment methods are weighted equally in their contribution to the overall EPA grade. The distinction grade is only available in the knowledge test and the professional discussion supported by portfolio. There is only a pass or fail available in the practical observation with questioning.

Grading

Assessment method 1: Practical observation with questioning

The apprentice will be deemed to have failed if they do not meet the criteria outlined in the pass descriptor

KSBs	Pass In order to achieve a pass, apprentices must demonstrate all of the pass descriptors.
Area of the standard to be tested: Prepare & Operate Equipment: CS1, CS3, CS5, CK5, CK7	<ul style="list-style-type: none"> • Prepares equipment in line with job specification and production schedule and/or procedures • Identifies any errors on works instructions and raises with appropriate person e.g. team leader, manager, office account manager. This is to clarify situation and avoid wastage – time, materials etc. • Regularly checks quality of output to ensure that job meets customer/job specification. Is able to explain why the frequency of quality checks is appropriate for the particular job specification • Runs equipment at optimum speed according to the production schedule and company guidelines whilst maintaining quality • Demonstrates ability to maintain press by washing up press, clearing offcuts, paper dust, regular maintenance, cleaning feed rollers, e.g. folding machines • Works in a safe manner, following procedures and does not compromise the safety of self or others • Actively minimises non-productive time e.g. ensuring components are prepared in advance for upcoming job, effective communication with departments passing on from or taking to

	<ul style="list-style-type: none"> • Cleans down and maintains equipment using correct protective equipment e.g. gloves & eye protection worn whilst cleaning, ensure machine is fully stopped and locked down safely during maintenance tasks.
Completion of relevant records: CS4	<ul style="list-style-type: none"> • Correctly records production information in line with company procedure
<p>Option 1: Pre-Press Technician</p> <p>Receive file, process and create output: PreK5, PreK6, PreS1, PreS3, PreS8</p>	<ul style="list-style-type: none"> • Demonstrates an understanding of company workflow software by updating the system with the correct job information e.g. amount of material received, time job started, amount of material used • Checks file against work instructions and clearly identifies and records any contradictions • Generates outputs to specification (e.g. plates, cylinders, screens and/or electronic files) • Advises press when plates, files, etc. are ready for use, number of plates etc., and copies of the job for reference • Communicates with other departments by articulating key information from office to pre-press, pre-press to press, press to post-press, post-press to dispatch • Demonstrates proficiency in a range of pre-press, design, workflow management and business software packages e.g. 'Screen True-flow', 'Adobe Creative Suite' and 'Tharstern' by processing files and generating appropriate output e.g. plates or screens.
<p>Option 2: Press Technician</p> <p>Effective use of paperwork: PK7</p> <p>Set up and run a multi-unit press optimally PS1, PS3, PS4, PS6, PS7</p>	<ul style="list-style-type: none"> • Checks job in and out of department e.g. is able to articulate key exchanges from office to pre-press, pre-press to press, press to post-press, post-press to dispatch. • Checks materials supplied against the work instruction to ensure all are provided and notifies appropriate personnel of any shortcomings • Updates all relevant systems in full e.g. company workflow software, print machine, job bag, shop floor data collection system • Prepares the machine in an efficient manner e.g. ensures company preparation and make-ready times are adhered to and exceeded if possible • Runs press optimally e.g. ensures that running speed of press is optimised for quality, output speed, minimal waste and safe operation

	<ul style="list-style-type: none"> • Measures output against job/customer specification and makes necessary adjustments e.g. colour matching, print resolution, product consistency • Demonstrates understanding of machine by setting up feed, substrate transport, delivery and producing a good copy (machine pass) for approval, to run at maximum speed according to company guidelines taking into account the variables of the job and with minimum wastage • Demonstrates ability to problem solve when issues arise, e.g. mis-register of colours, paper jams, web breaks, inking problems, machine adjustments, machine breakdowns, set-off • Demonstrates they are in control of the machine and the materials, understands the running of the machine, monitors the work of the crew (if appropriate), monitors use of materials – paper, board, ink, toner, font solutions • Maintains discipline and focus throughout the observation, proceeding in a calm and professional manner to deliver outputs in line with company and customer expectations and deadlines
<p>Option 3: Post-Press Technician</p> <p>Set up and run a machine optimally: PostS3, PostS4, PostS6, PostS7</p>	<ul style="list-style-type: none"> • Sets up and runs the machine using optimal settings in line with company guidelines • Demonstrates ability to problem solve in the event of problems or challenges with the machine e.g. clearing blockages, making adjustments for material variances • Measures output against finished product/specification in line with deadlines • Transfers materials & finished product safely and efficiently on time and in full according to the job specification and deadlines • Proceeds in a calm and professional manner throughout the observation

Assessment method 2: Knowledge Test

See mapping of Knowledge, Skills and Behaviours section.

The following grade boundaries apply to the test:

Grade	Minimum score	Maximum score
Distinction	55	60
Pass	48	54
Fail	0	47

Assessment method 3: Professional Discussion

The apprentice will be deemed to have a 'fail' for the professional discussion if any of the criteria / descriptors for 'Pass' grade are not met.

KSBs	Pass In order to achieve a pass, apprentices must demonstrate all of the pass descriptors.	Distinction In order to achieve a distinction, apprentices must demonstrate all the pass descriptors and all the distinction descriptors.
Area of the standard to be tested: Organisation relationships and company's position in the wider industry CK2, CK4, CS6, CB5,	Describes how organisations work with examples of each aspect of culture, values, process and shows understanding of the importance of their role <i>e.g. at least 2 different items from the company culture statement, and a walkthrough of their core process</i> Describes the importance of supplier inputs, processing requirements and downstream outputs <i>e.g. works instructions, performance evaluation</i>	Gives examples of areas of risk within their supply chain and examples of how to mitigate these risks Describes what information is important regarding supplier inputs; processing requirements and downstream outputs with an explanation and examples in each case <i>e.g. works instructions, performance evaluation, and bringing attention to possible risks</i>

	<p>Describes how pre-press, press and post-press processes and equipment operate. Articulates the commercial impact of their role <i>e.g. identifies a potential risk in the supply chain caused by process not being followed</i></p> <p>Describes how the printing equipment operates by providing an explanation of the capabilities and limitations of the specific press. Discusses elements about the printing process along with an explanation of how to successfully achieve each task in a timely and accurate manner</p> <p>Describes effective communication and what the potential impact of poor communication might be. <i>E.g. Missing special works instructions, informing the next shift of exceptional matters</i></p> <p>Understands the importance of liaising with other departments. Gives an example of where this communication has ensured efficient and effective finishing. Demonstrates confidence to challenge working practices and promote new ideas</p>	<p>Explains how they have used a communication technique to resolve a problem or issue in the workplace <i>e.g. proactively phoning a customer, email, face-to-face discussion</i></p> <p>Gives examples of where this communication has ensured efficient and effective outcomes</p>
Apprentice understands problem solving approaches and how to apply in the workplace:	Demonstrates an understanding of problem solving techniques, what they are used for and how they could be applied in a timely	Articulates what problem solving techniques they have used, why that technique was preferential and how they could be applied optimally to prevent further issues

<p>CK8, CS2, CS7, CB2, CB3 CB1</p>	<p><i>manner e.g. Root cause analysis, Plan, Do, Check, Act</i></p> <p>Demonstrates implementation of practical solutions. Is able to articulate timescales and can describe why timing is important</p> <p>Gives examples of team improvements made and how these were managed within the team to ensure that the outcomes were optimised. Describes examples of how technical support was provided to other team members and departments and how the outcome was improved such as training or process development</p> <p>Gives an example of new technology or working practice and can explain the benefits of implementation. <i>E.g. web-to-print workflows, automated plate loaders</i></p> <p>Describes the elements of methodical and process driven method of working to ensure efficient productivity. Describes one idea of process/workflow change to enhance effective and efficient printing</p> <p>Demonstrates how they receive feedback and learning points, and can describe when instances of reliability and flexibility were important. Is able to describe company guidelines. <i>E.g. following Standard Operating</i></p>	<p>from occurring <i>e.g. keeping a machine log indicating causes of problem, actions taken, parts replaced</i>. If this is a temporary solution indicate what needs to be done long term <i>e.g. major overhaul of an area of the machine, need for a specialist engineer to solve the on-going problems</i></p> <p>Describes challenges of working with others and how they were overcome. Can articulate opportunities for further improvements to be made</p> <p>Understands the relevance and importance of identifying and preventing issues within department that affect 'downstream/upstream' departments. Able to work with other departments to resolve problems and identify opportunities for improvement</p> <p>Demonstrates an understanding of LEAN techniques <i>e.g. 5S, 5M, 5Whys, 8 Wastes</i></p> <p>Gives a range of examples of new technologies and working practices, as well as why they are relevant to the company and/or industry. Explains examples of implementation including the benefits and risks associated with that implementation <i>e.g. web-to-print workflows, automated plate loaders</i></p>
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	<p><i>Procedures for the equipment and state why they are needed</i></p>	<p>Describes a methodical and process driven method of working to ensure efficient productivity. Describes more than one idea of process/workflow change to enhance effective and efficient printing</p> <p>Can provide examples of learning points, and instances of when reliability and flexibility were important. <i>E.g. to meet challenging deadlines, or to minimise costs.</i> Is able to describe company guidelines with practical examples of what specific policies can achieve. Provide an example of having dealt with a situation that required resolving to a satisfactory outcome by including at least 2 different styles of communication to resolve a concern or complaint. <i>E.g. Face-to-face, telephone, letter and email</i></p>
<p>Apprentice understands health & safety: CK7</p>	<p>Demonstrates applied health, safety and environmental processes with examples of why they are important and what issues they are designed to prevent. <i>E.g. failure to comply with these requirements could result in accidents to themselves, other people within the work area, damage to health, i.e. deafness as a result of not wearing hearing protection, damage to machinery which could result in lost production time, if an accident occurs and the rules haven't been followed possibly an invalid</i></p>	

	<p><i>insurance claim, contamination of the air, water drainage systems</i></p> <p>Articulates their own responsibilities with regards to H&S, specifically Health & Safety at Work Act 1974</p>	
<p>Role and the technical aspects of the occupation</p> <p>CB4, CS8,</p>	<p>Gives examples of work, which has been produced to specification. Demonstrates timely and accurate reporting methods as well as the importance of doing so</p> <p>Describes a range of components of supervision giving examples of how operatives were instructed, supported and challenged. <i>E.g. mentoring, coaching, monitoring, facilitating</i></p>	<p>Demonstrates how they have instructed print operatives by using the essential components of supervision. <i>E.g. H&S compliance, quality control, optimization of running speed</i></p> <p>Provides third party feedback on outstanding job quality.</p> <p>Able to win client confidence through demonstrated technical excellence and ability to communicate with client to understand their needs. Needs to provide evidence.</p>
<p>Pre-Press Technician only:</p> <p>PreS2, PreS4, PreS5, PreS6, PreS7, PreK3</p>	<p>Explains conversion of customer files to print-ready files using various software and workflow packages. Explains which piece of software or package is appropriate for each job or aspect of work.</p> <p>Provides evidence of successful advice being used by the customer to increase levels of quality and or service.</p> <p>Understand page layout and quality control aids included on the image carrier with regards to space utilisation, orientation, right reading and imposition together</p>	<p>Gives examples of how workflow has been used to improve quality and service and/or to spot errors and make process improvements.</p> <p>Explains a range of print-related issues and how to best resolve them, with examples <i>e.g. dot gain, set-off, colour variation.</i></p> <p>Understand and articulate the different need for bleed, trim marks, colour bars, registration targets, folio numbers, job description details, section marks and numbers on the image carrier.</p>

	<p>with requirements for grip and leave edges. Explain what the input/output requirements are throughout the process <i>e.g. file transfer, workflow and production requirements</i>. Demonstrates how they determine the impact of not performing each aspect successfully, <i>e.g. colour profiling, trapping, dot gain</i>.</p> <p>Produces timely and accurate proofs in both digital and printed formats in line with works instructions. Explains why the proof is important to the customer and to other areas of production, as well as factors that can affect proof-reading such as standard lighting</p>	<p>Articulates the factors that can affect proof-reading and print production.</p>
<p>Press Technician only: PS2, PS5, PK1, PK5</p>	<p>Demonstrates the application of colour management/control and other reproduction techniques in a timely and accurate manner.</p> <p>Defines the purpose and function of the majority of consumables used within the printing process. Describes routine maintenance requirements and the implications of not carrying these out. Describes the mechanical processes involved in printing and can identify the appropriate printing solution for a particular scenario (<i>e.g. litho v digital</i>).</p> <p>Demonstrates the ability to apply the knowledge learned to ensure cost effective job change over. Relays an understanding of the importance of following processes and workflow. Demonstrates</p>	<p>Explains a range of reproduction techniques and their application.</p> <p>Describes the purpose and function of all consumables used within the printing process.</p> <p>Gives examples of using initiative to prevent unnecessary costs and waste (<i>e.g. challenging ambiguous instructions</i>). Recognises and understands the requirements of processes further on in production. Describes examples of how working together as a team has improved the effectiveness of the process <i>e.g. improved quality controls</i></p>

	<p>confidence to challenge working practices and promote new ideas. Recognises and understands the requirements of processes further on in production. Describes one example of how working together as a team has improved the effectiveness of the process <i>e.g. improved quality controls</i></p>	
<p>Post-Press Technician only: PostK5, PostK8, PostS1, Post S2, PostS5</p>	<p>Describes at least two finishing processes which are used to convert printed images into finished products. Explains and understands the importance of working in a safe manner, identifying the hazards in relation to the finishing processes, and how these are managed.</p> <p>Understands what constitutes a successfully manufactured product. Is able to give one example and distinguish between a successfully manufactured product and a substandard product. Can identify what has caused a product to be substandard and demonstrates the knowledge required to solve the issues causing the product to be substandard</p> <p>Describes how to efficiently and effectively set up, run and maintain a range of finishing equipment. Is able to give one example of a problem, which may occur during the run and explains how to solve the issues.</p> <p>Describes the elements of a methodical and process driven technique to ensure efficient production. Describes an example</p>	<p>Describes at least three finishing process used to convert printed images into finished products. Gives examples of how these have been used in the workplace. Is able to give more than one example of situations when safe working is not happening and how to resolve the situation to ensure safe working.</p> <p>Gives more than one example and distinguish between a successfully manufactured product and a substandard product <i>e.g. colour variation</i>. Can identify what has caused a product to be substandard and demonstrates the knowledge required to solve the issues causing the product to be substandard and gives ideas of process change to avoid repetition.</p> <p>Gives more than one example of problems which may occur during the run and explains how to solve these issues. Describes a methodical and process driven technique which ensures efficient production. Describes more than one idea of process/workflow change to enhance effective and efficient finishing</p>

	<p>of process/workflow change to enhance effective and efficient finishing e.g. improving throughput.</p> <p>Demonstrates an understanding of different finishing processes. Articulates why and when certain finishes are applied in different scenarios in order to achieve the best results</p> <p>Demonstrates awareness of production scheduling and examples of how liaising with press and pre-press areas has worked.</p>	<p>Offers further ideas around the finishing process that when applied may be able to enhance the product. Then be able to explain the pros and cons of each scenario.</p> <p>Demonstrates how challenges have been overcome through the interaction with other departments.</p>
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Overall EPA grading

All assessment methods must be passed for the EPA to be passed overall.

EPAOs must combine the grades of the three assessment methods to determine the EPA grade.

There are two grades available upon successful completion of the End Point assessment. These are: 'pass', which represents full occupational competence as a Print Technician and 'distinction' which represents an exemplary level of competence.

In order to achieve a 'pass' grade, the apprentice must successfully achieve a pass in all three assessment methods. In order to achieve a 'distinction' grade, the apprentice must successfully achieve a distinction in both the knowledge test and the professional discussion and a pass in the practical observation assessment. If an apprentice achieves a distinction in either the knowledge test or the practical demonstration and a pass in the other, overall they will have achieved a pass.

Independent assessors' decisions must be subject to moderation by the EPAO – see internal quality assurance section below.

Decisions must not be confirmed until after moderation.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method 1: Practical Observation	Assessment method 2: Knowledge Test	Assessment method 3: Professional Discussion	Overall grading
Fail	Any grade	Any grade	Fail
Any grade	Fail	Any grade	Fail
Any grade	Any grade	Fail	Fail
Pass	Pass	Pass	Pass
Pass	Distinction	Pass	Pass
Pass	Pass	Distinction	Pass
Pass	Distinction	Distinction	Distinction

Roles and responsibilities

Role	Responsibility
Apprentice	<ul style="list-style-type: none"> • participate in development opportunities to develop the knowledge skills and behaviours as outlined in the occupational standard • meet all gateway requirements as advised by the employer • understand the purpose and importance of EPA and undertake EPA
Employer	<ul style="list-style-type: none"> • support the apprentice to achieve the KSBs outlined in the occupational standard to their best ability • determines when the apprentice is working at or above the level outlined in the standard and is ready for EPA • select the EPAO from the Register of End-Point Assessment Organisations (may be advised by training provider) • confirm all EPA gateway requirements have been met • confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner • ensure apprentice is prepared for the EPA • provide assessor with a copy of the company culture statement
EPAO	<p>As a minimum EPAOs should:</p> <ul style="list-style-type: none"> • understand the occupational role • on receipt of 'triggered' EPA request from employer, contact the employer and arrange dates, times and locations for the required EPA • appoint administrators/invigilators and markers to administer/invigilate and mark the EPA • provide appropriate and qualified staff to enable completion of all aspects of the EPA • provide training and CPD to the independent assessors they employ to undertake the EPA • provide adequate information, advice and guidance documentation to enable apprentices, employers and providers to prepare for the EPA • deliver the end-point assessment outlined in this EPA plan in a timely manner

	<ul style="list-style-type: none"> • prepare and provide all required material and resources required for delivery of the EPA in-line with best practices • use appropriate assessment recording documentation to ensure a clear and auditable mechanism for providing assessment decision feedback to the apprentice • communicate re-sit/re-take arrangements, where required • have no direct connection with the apprentice, their employer or training provider i.e. there must be no conflict of interest • maintain robust internal quality assurance (IQA) procedures and processes, and conducts these on a regular basis • conform to the requirements of the nominated external quality assurance body • organise standardisation events and activities in accordance with this plan's IQA section • organise and conduct moderation of independent assessors' marking in accordance with this plan • have, and operate, an appeals process • arrange for certification with the relevant training provider
Independent assessor	<p>As a minimum an Independent assessor should:</p> <ul style="list-style-type: none"> • understand the occupational standard and EPA plan • deliver the end-point assessment in-line with the EPA plan • comply to the IQA requirements of the EPAO • be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest • satisfy the criteria outlined in this EPA plan • hold or be working towards an independent assessor qualification e.g. TAQA (Training Assessment and Quality Assurance and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading • have the capability to assess the apprentice at this level • attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section)

Training provider	<p>As a minimum the training provider should:</p> <ul style="list-style-type: none"> • work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period • advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway • plays no part in the EPA itself
Invigilators	<ul style="list-style-type: none"> • ensure that the knowledge test is conducted in appropriate conditions as set out in this plan
Markers	<ul style="list-style-type: none"> • mark the knowledge test (if not electronically marked) in accordance with the criteria set out in this end-point assessment plan, using the tools provided by the EPAO

Internal Quality Assurance (IQA)

Internal quality assurance refers to the requirements that EPA organisations must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this EPA must:

- appoint independent assessors who have recent relevant experience of the occupation/print industry at least the same level as the apprentice which has been gained in the last three years or with significant experience of the occupation/print industry
- appoint independent assessors who are competent to deliver the end-point assessment and who meet the following minimum requirements:
 - be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest
 - hold or be working towards an assessor qualification e.g. TAQA (Training, Assessment, Quality & Assurance) and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- provide CPD activities that are appropriate to meeting the development needs of the independent assessors
- have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time.
- operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this standard and before they deliver an updated assessment method for the first time. Independent assessors must attend standardisation events at least once per year.

Re-sits and re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit any failed assessment methods only.

Any assessment method re-sit or re-take must be taken during the maximum EPA period, otherwise the entire EPA must be taken again, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

Affordability

Affordability of the EPA will be aided by using at least some of the following practice:

- online assessment
- using an employer's premises
- the practical observation includes the requirement to be observed completing real activities in the workplace, reducing down time of the apprentice
- the practical observation with questions and the professional discussion supported by portfolio can take place on the same day.

Professional body recognition

Professional body recognition is not relevant to this occupational apprenticeship.

Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments for this apprenticeship standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this EPA plan.

Mapping of knowledge, skills and behaviours (KSBs)

Key to Knowledge, Skills and Behaviours:

Core Knowledge	CK
Core Skills	CS
Core Behaviours	CB
Option 1 Pre-press Knowledge	PreK
Option1 Pre-press Skills	PreS
Option 2 Press Knowledge	PK
Option 2 Press Skills	PS
Option 3 Post Press Knowledge	PostK
Option 3 Post Press Skills	PostS

Code	Type	Criteria	Assessment Method
Core			
CK1	Knowledge	The printing and graphic communication industry and its markets.	Knowledge Test
CK2	Knowledge	How the organisations in the printing industry work, including their culture, values, processes and how you fit in.	Professional Discussion
CK3	Knowledge	Technical knowledge and print industry practices, processes & the materials used to carry out the occupation	Knowledge Test

Code	Type	Criteria	Assessment Method
		effectively, e.g. practices can include maintenance and continuous improvement; processes include printing, quality assurance and colour management; materials include mainly paper and board, but also plastic, metal and other materials.	
CK4	Knowledge	Pre-press, press and post-press processes and equipment and the commercial impact of their role e.g. ensuring that printed material is presented to post-press in perfect condition.	Professional Discussion
CK5	Knowledge	Customers' expectations in terms of order specification and timescales.	Practical Observation
CK6	Knowledge	Quality expectations and how they are managed.	Knowledge Test
CK7	Knowledge	The print and graphic communications industry health, safety and environmental requirements and laws, including the Health and Safety at Work Act 1974.	Knowledge Test, Practical Observation, Professional Discussion
CK8	Knowledge	How best to solve problems and implement practical solutions in a timely manner.	Professional Discussion
CS1	Skills	Efficiently operate print machinery and equipment according to the order specification and timescale e.g. print a colour magazine onto paper within 2 hours to meet the production schedule; fold a leaflet to specification and timeframe.	Practical Observation
CS2	Skills	Follow a structured approach and methodology to identify areas for improvement, proposing and implementing solutions.	Professional Discussion

Code	Type	Criteria	Assessment Method
CS3	Skills	Carry out work to required quality standards, targets and deadlines. Standards include colour matching, print resolution and matching customer specification and individual company standards	Practical Observation
CS4	Skills	Keep accurate records using both digital and manual processes as required	Practical Observation
CS5	Skills	Comply with health, safety and environmental requirements at all times. This includes the Health and Safety at Work Act 1974 (e.g. produce risk assessments and safely handle hazardous materials).	Practical Observation
CS6	Skills	Communicate and work effectively with others, including giving clear instructions to colleagues.	Professional Discussion
CS7	Skills	Implement practical solutions in a timely manner.	Professional Discussion
CS8	Skills	Ability to supervise and instruct print operatives. Ability to take the lead as required.	Professional Discussion
CB1	Behaviours	Willing to both listen and learn. Be dependable, reliable and flexible. Perform role in a safe manner by following company policies and guidelines.	Professional Discussion
CB2	Behaviours	Work effectively with others in a team. Carry out work with integrity and discretion. Work with others to create improvements. Work with other departments and teams to provide support of a technical nature as required.	Professional Discussion
CB3	Behaviours	Open to new ideas, i.e. new technologies and working practices.	Professional Discussion

Code	Type	Criteria	Assessment Method
CB4	Behaviours	Follow process and procedures to ensure that work meets specifications. Report consistently and accurately.	Professional Discussion
CB5	Behaviours	Communicate effectively and recognises the importance of good communication.	Professional Discussion
Pre-Press Technician			
PreK1	Knowledge	Creation of an output image carrier ready for onward production, i.e. a print-ready electronic file; plate; cylinder or screen).	Knowledge Test
PreK2	Knowledge	Production of plates, cylinders, screens and/or electronic files to the required production standard.	Knowledge Test
PreK3	Knowledge	Recognise the different company equipment and its associated needs in printing and finishing processes, so pre-press can support the other departments in meeting customer specifications effectively e.g. setting colour profiles accurately so the print technicians can set up their machines more effectively.	Professional Discussion
PreK4	Knowledge	Application of Colour Theory in the various industry processes e.g. quality assurance.	Knowledge Test
PreK5	Knowledge	Receipt, checking, and processing of digital files such as print-ready PDFs, database and colour/ink profile files.	Practical Observation
PreK6	Knowledge	Reports and relevant paperwork for specified job/department to improve communication and demonstrate accountability.	Practical Observation
PreK7	Knowledge	Design and production of creative digital artwork appropriate for print production.	Knowledge Test

Code	Type	Criteria	Assessment Method
PreK8	Knowledge	Planning and production of edited images ready for various software such as Adobe InDesign, Illustrator, Photoshop, QuarkXPress etc.	Knowledge Test
PreK9	Knowledge	How to check digital files and solve issues with software and work flow management such as colour profiling and data integrity.	Knowledge Test
PreK10	Knowledge	Creation of imposition schemes and job layouts	Knowledge Test
PreS1	Skills	Demonstrate proficiency in a range of pre-press, design, workflow management and business software packages e.g. 'Screen True-flow', 'Adobe Creative Suite' and 'Tharstern'	Practical Observation
PreS2	Skills	Convert customer files to print-ready files using various software and workflow packages.	Professional Discussion
PreS3	Skills	Send, receive and process digital files in the workflow, or e.g. using Adobe Creative Suite.	Practical Observation
PreS4	Skills	Discuss job/design brief matters with the customer and provide advice on print-related issues where necessary.	Professional Discussion
PreS5	Skills	Use of scanning techniques to create digital images that are compatible with each company's workflow management software and production requirements.	Professional Discussion
PreS6	Skills	Produce a printed or digital 'proof' (replicates what the final job will look like) for the customer from requirements defined by the customer.	Professional Discussion
PreS7	Skills	Manage digital colour reproduction in pre-press so that the Press Technician can set up and run effectively.	Professional Discussion

Code	Type	Criteria	Assessment Method
PreS8	Skills	Produce plates/screens/output files and materials to meet production schedule and machine requirements.	Practical Observation
Press Technician			
PK1	Knowledge	The employer's printing machinery, including a detailed understanding of the full operating capabilities and limitations of the specific press type and printing process.	Professional Discussion
PK2	Knowledge	Production processes including the cause and effect of pre-press issues on print and print issues on post-press.	Knowledge Test
PK3	Knowledge	Presses are high-value capital equipment. Therefore an in-depth knowledge of how to prepare a machine for running, shut it down properly after running, and maintain long-term working effectiveness is essential.	Knowledge Test
PK4	Knowledge	The properties and structures of materials, inks, toners, blankets, plates, cylinders and the various chemicals required for successful long-term operation and maintenance.	Knowledge Test
PK5	Knowledge	Quality control expectations and techniques, costs, and other continuous improvement practices which increase the effectiveness of the printing process.	Professional Discussion
PK6	Knowledge	How to safely handle, transport and store various materials and chemicals within the print working environment in line with company guidelines and the Health and Safety at Work Act 1974.	Knowledge Test
PK7	Knowledge	How to complete all reports and relevant paperwork for specified job/department to improve	Practical Observation

Code	Type	Criteria	Assessment Method
		communication and demonstrate accountability.	
PS1	Skills	Set up, run and maintain a specific type of multi-unit printing press at the appropriate speed and at quality levels dictated by the work instructions and company guidelines. This can include cleaning and servicing key elements or preparing the machine for the next shift. If operating digital printing equipment must be able to handle variable data requirements	Practical Observation
PS2	Skills	Deal with a wide range of different printing operations such as managing colour, handling inks/toners, cleaning and maintenance, or operating different types of printing press etc.	Professional Discussion
PS3	Skills	Run printing presses optimally. They must identify and solve problems to keep the machine in good working order and to ensure that jobs are produced on-time, in-full and without waste.	Practical Observation
PS4	Skills	Use visual and computer aids so that colour and product specifications are within the expected tolerances before running the job.	Practical Observation
PS5	Skills	Make sure that the press is ready for the next job or shift. The ability to work well as part of a team so that technical issues are understood by others as required.	Professional Discussion
PS6	Skills	Work to tight deadlines in a calm and professional manner. Able to maintain disciplines and focus under pressure in line with company and customer expectations.	Practical Observation

Code	Type	Criteria	Assessment Method
PS7	Skills	Ensure that customer specification and company quality standards are met e.g. colour matching, print resolution, product consistency etc.	Practical Observation
Post-Press Technician			
PostK1	Knowledge	Pre-press and post-press processes and equipment and how their role will impact upon others.	Knowledge Test
PostK2	Knowledge	Properties and structures of materials, adhesives and various other chemicals and able to explain them in detail e.g. adhesives, laminates and paper.	Knowledge Test
PostK3	Knowledge	Physical properties of the numerous paper/plastic stocks and their benefits & constraints, including weight, grain direction, coatings and how this affects the final product.	Knowledge Test
PostK4	Knowledge	How to convert sheets into pages and products for example 'sheet-work', 'work-and-turn', and 'work-and tumble'.	Knowledge Test
PostK5	Knowledge	How to safely and effectively convert the source materials (e.g. printed paper and gold foil) into the customer's specific product (e.g. a special edition videogame pack) by using a combination of machinery and processes.	Professional Discussion
PostK6	Knowledge	The benefits and constraints of the many different folding types including parallels, gatefolds, barn door flap folds, and letter folds (wrap folds).	Knowledge Test
PostK7	Knowledge	How to apply different finishes to different substrates e.g. scented varnish, holographic foiling, soft-touch laminate, near-field communication sticker etc.	Knowledge Test

Code	Type	Criteria	Assessment Method
PostK8	Knowledge	How the final product is expected to perform and the process by which it is to be received by the customer.	Professional Discussion
PostS1	Skills	Set up, run and maintain a specific range of finishing equipment at the appropriate speed and at quality levels dictated by the work instructions and company guidelines, such as: guillotines, stitching-trimming machinery, binding machinery, laminating equipment, die-cutters. This can include cleaning and servicing key elements or preparing the machine for the next shift.	Professional Discussion
PostS2	Skills	Deal with a range of finishing processes which may include varnishing, folding, embossing/debossing, foil blocking, scoring, packing, gluing, match & attach, tab & slot, sorting, banding, packing, wrapping etc.	Professional Discussion
PostS3	Skills	Operate finishing equipment optimally. Apply problem-solving skills & techniques to ensure that machinery is maintained in good working order and that the final product meets the specification whilst minimising wastage	Practical Observation
PostS4	Skills	Accurately measure the finished product against customer specification and company standards e.g. folding accuracy, stitch alignment, foil position etc.	Practical Observation
PostS5	Skills	Liaise with pre-press and press areas to ensure that customer timescales are met	Professional Discussion
PostS6	Skills	Handle and transport materials and other inventory within the finishing area working environment.	Practical Observation

Code	Type	Criteria	Assessment Method
PostS7	Skills	Work to tight deadlines, in a calm and professional manner whilst achieving deadlines.	Practical Observation