

Furniture Manufacturer

Apprenticeship Standard Specification ST0203/AP02

1.1 Occupational profile

The Furniture, Furnishings and Interiors industry is of significant importance to the UK economy, particularly in the supply of end products for residential and commercial living and work places. The industry has an annual turnover well in excess of £12 billion. The ability to work to agreed targets in terms of output and quality standards is essential. Workplaces can be wide - ranging from small workshops to large factories. Furniture Manufacturers must be dexterous, have a good work ethic and able to demonstrate their ability to work individually and as part of a team.

The programme is designed to give a wide range of skills appropriate to the different occupations in the industry. This apprenticeship covers the following occupational areas:

- General Furniture Manufacturer
- Bed Manufacturer
- Modern Upholsterer
- Furniture Finisher
- Fitted Furniture Installer
- Furniture Restorer
- Modern Furniture Service Repairer
- Foam Convertor and Upholstery Cushion Interior Manufacturer
- Wood Machinist
- Furniture CNC Specialist

Each apprentice will take the occupational route that is best suited to the business they work in. They will complete all the core requirements set out below and then the set number of requirements for the chosen route.

Each business, depending on size, market position and skills needs, will require a different combination of the optional requirements detailed within each occupational area. This apprenticeship is designed to allow the business and the apprentice to agree which of these options are most valuable to the apprentice and organisation. The number of requirements is set for each occupational area as being the minimum needed to ensure competence and transferability but any employer is free to train their apprentice in additional requirements outside of the apprenticeship and at their own cost.

1.2 Purpose

This apprenticeship has been designed by furniture industry employers to ensure that both new entrants and those interested in progressing a career in the sector have an opportunity to develop the right skills, knowledge and behaviours. This apprenticeship is a fantastic way of developing these skills whilst learning and gaining experience at work.

1.3 Requirements of the Furniture Manufacturer Standard

This standard has two elements; core requirements and occupational areas (pathways). All apprentices must evidence the core knowledge, skills and behaviour requirements as set out in Part A of the standard (Section 1.11). Apprentices must then select which occupational area they are undertaking and ensure that they meet the skills as specified within that occupational area (Part B, Section 1.11)

1.4 Entry requirements

There are no formal entry requirements for apprentices selecting this apprenticeship standard. Employers and training providers must ensure that learners have the potential and opportunity to achieve the apprenticeship standard successfully.

1.5 Gateway requirements

Gateway requirements are stipulated by the apprenticeship standard's assessment plan and End-point Assessment Organisation's must ensure that all apprentices have completed and achieved the requirements.

Furniture Manufacturer apprentices must have exceeded the 12 month Government minimum duration and completed a programme of learning as set by their employer, supported by the appointed training provider. The programme will develop the skills, knowledge and behaviours detailed in the standard.

Apprentices are required to achieve the following mandated qualifications for this standard:

- Level 1 English
- Level 1 mathematics
- Test results and/or certificates for Level 2 English and Level 2 mathematics.

Evidence of these qualifications must be submitted to OAL along with a declaration that the apprentice has met the gateway requirements. Qualification certificates can be submitted at any point once the apprentice has been registered on our portal. OAL will accept qualification certificates from any awarding organisation.

Apprentices, who have previously achieved their English and/or mathematics as specified above, must submit their qualification certificates to Occupational Awards Limited as evidence of achievement and exemption.

In the main OAL expects evidence to be in the form of the qualification certificate. Where the certificate is not available then a formal transcript or notification of results. Where either a certificate or formal notification of results is not available, but the apprentice has other evidence that may be acceptable, you should contact us directly so we can offer advice on the verification of the evidence.

Apprentices and their employer/training provider should refer to the OAL English and Mathematics policy for end-point assessment gateway evidence available at [OAL Policies](#) for evidence requirements of English and mathematics achievement.

1.6 End-point Assessment (EPA)

End-point assessment for this standard includes a:

- [Knowledge test](#)

There are two requirements for the knowledge test. A 60 minute health and safety test and a 40 minute industry test. The two tests can be taken separately on different occasions or back to back. They can be taken in the workplace or at an assessment centre. Both tests are available online or paper-based. The two test scores are combined to give an overall grade for this component. The health and safety test comprises 45 multiple-choice questions and the industry test comprises 30 multiple-choice questions.

- [Practical observation](#)

The observation takes place over a maximum 2-hour period. It can be carried out in the workplace or in a simulated furniture manufacturing environment. The employer premises will need to be recognised by OAL as a recognised EPA site. This process is simple and typically involves a 60-minute assessment by OAL or the training provider on our behalf.

The observation will be based on a set of key tasks detailed in the OAL Apprentice EPA Handbook and OAL Furniture Manufacturer Standard Handbook. Once the apprentice has successfully passed through gateway a planning session will take place between the employer, training provider and OAL. The outcome of the planning session is to not only ensuring that the EPA runs smoothly on the day but also to allow for the process tasks to be mapped to the apprentice's duties and activities. The plan will provide details for the apprentice of how to showcase their application of knowledge, skills and behaviours.

- **Portfolio of evidence**

Apprentices are required to submit a portfolio of evidence 5 working days before the date of the booked EPA. It is preferable that an e-portfolio is used, however paper based evidence can also be uploaded to the OAL Portal. The portfolio will comprise a collection of the apprentices best evidence gathered during the programme of learning. The evidence must demonstrate the knowledge, skills and behaviours as listed in the standard.

End-point assessment will take place at the end of the programme and is designed to test apprentices' knowledge, skills and behaviours independently of learning and qualifications. The apprentice will not be allowed to take the end-point assessment without evidencing completion of these.

Apprentices will be given access to the OAL Apprentice End-point Assessment Handbook once they have been enrolled onto the standard. The Apprentice EPA Handbook sets out the assessment requirements of EPA and the criteria on which the apprentice will be graded.

1.7 Order of end-point assessment

The portfolio of evidence must be assessed before the practical observation. The knowledge test can be taken at any stage during the 12-week EPA period.

1.8 Assessment personnel

An independent assessor appointed by OAL must assess the portfolio of evidence and practical observation. The same independent assessor will assess these two components. An individual appointed by OAL or an independent assessor can invigilate the test.

1.9 Apprenticeship grading

The apprenticeship is graded: fail, pass or distinction. Apprentices must achieve a minimum of a pass in each of the 3 components. Results are subject to quality assurance and will be issued every 10 working days to the named training provider. OAL will send results to the Education and Skills Funding Agency in line with guidelines for certification.

An apprentice can retake a component of their EPA if they fail. In this instance the apprentice cannot be awarded an overall grade of distinction the final grade will be capped at pass. It is expected that a period of further learning will need to be undertaken if the apprentice has to re-take any part of the end-point assessment. OAL can make exemptions to this ruling should reasons for the fail are deemed to be outside the control of the apprentice.

1.10 EPA fees

The Furniture Manufacturer apprenticeship standard attracts a total funding of £9,000. 20% of the total apprenticeship funding is withheld until the EPA has been concluded, this is to encourage completion of the apprenticeship training and mandated qualifications. In respect of this standard this represents the maximum cost of an EPA.

OAL typically charges 15% of the total funding for this standard. However fees are worked out on an individual basis to ensure that employers and apprentices get the best value for money. For approved centres our fees can be found in the OAL portal. Non-approved centres should contact us directly for a bespoke quote.

At OAL there are no hidden fees. Our fees are inclusive of all support, documentation and materials. This includes access to our team of experts to support the induction of apprentices, preparation for EPA, handbooks and assessment specifications and materials.

Key to table in 1.11

- PO Practical Observation
- PoE Portfolio of Evidence
- MCQ Multiple-choice Questions

1.11 Standard Knowledge, Skills and Behaviour (KSB) criteria

Part A: core requirements

Furniture Manufacturer

Part A: Core requirements

Knowledge statements		Assessed by:
Industry	Knowledge and understanding of general background of the furniture industry.	MCQ/PoE
Organisation	Knowledge and understanding of the company you are working in. This includes understanding the manufacturing process and how you contribute and fit into it.	PO/PoE
Materials	Knowledge and understanding of industry materials. Properties and characteristics of materials used within your organisation.	PO/PoE
Customers	Knowledge and understanding of customer expectations. Who are the industry customers and what are their expectations in terms of packaging and delivery?	PO/PoE
Quality Standards	Know the quality standards which apply to the products and how to check that these have been met. Read and interpret specifications, drawings, cutting lists and other relevant technical information used within your organisation.	PO/PoE
Health, Safety and Environment	Knowledge and understanding of the relevant health, safety and environmental requirements and regulations. Understand sustainability within the industry.	MCQ/PO/PoE
Skills statements		Assessed by:
Maintain Tools & Equipment	Perform regular autonomous maintenance tasks on machinery, tools and equipment used.	PO/PoE
Problem Solving	Identify issues quickly, solve problems and apply appropriate solutions.	PO/PoE

Skills statements		Assessed by:
Achieve quality and output targets	Carry out work to required quality standards and output targets. High attention to detail, must monitor and check work meets specifications and must follow methodology and processes.	PO/PoE
Health & Safety	Comply with health, safety and environmental requirements, relevant statutory regulations and industry standards/codes of practice at all times.	PO/PoE
Behaviour statements		Assessed by:
Collaboration & Adaptability	Willing to both listen and learn and to accept changing priorities and working requirements. Work effectively with others in a team whilst maintaining effective professional working.	PO/PoE
Time management	Time management and ability to complete work to schedule.	PO/PoE
Pride in the workplace	Organise work space for efficiency and effectiveness by identifying and storing items used, maintaining work area and sustaining order.	PO/PoE

Part B Occupational area requirements

General Manufacturer requirements

Furniture Manufacturers must take **6** of the following requirements at least **3** must be from **Group A**.

Group A		Assessed by
Machinery, Tools and Equipment	Set up and operate machinery, tools and equipment used to produce furniture. Understand tools and equipment used.	PO/PoE
Components	Make components of furniture to specification within acceptable tolerances. Understand how and where components are used.	PO/PoE
Cutting	Use appropriate equipment to cut materials within acceptable tolerances.	PO/PoE
Joints	Understand the principles of joints used in making hand-crafted furniture.	PO/PoE
Veneers and Laminates	Select, prepare and apply veneers to items of furniture.	PO/PoE
Assembly	Assemble components of furniture. Understand the sequence of assembly and why this is important.	PO/PoE
Finishing	Apply stains, sealers, basecoats and finishes to production furniture.	PO/PoE
Group B		Assessed by
Measure and Mark Out	Measure and mark out materials to specification.	PO/PoE
Sanding	Sand materials for preparation prior to assembly, post-assembly and de-nibbing. Understand grit sizes and the process of sanding.	PO/PoE
Cramping	Position components and apply cramps to ensure products are positioned securely to specification.	PO/PoE

Group B		Assessed by
Fittings	Prepare and assemble components to specification, finishing and checking the assembly conforms to specifications.	PO/PoE
Gluing	Apply adhesives to components. Understand types, methods and processes involved in gluing.	PO/PoE
Jigs and Templates	Use and maintain jigs and templates for furniture production. <i>Jigs are used to ensure repeatability and accuracy in the production of furniture. These can be hand held or mounted on workbenches.</i>	PO/PoE
Edge Banding	Carry out edge-banding process following standard operating procedures. Edge banding is the process of applying a trim or edge to the piece of furniture to make it neat and aesthetically pleasing.	PO/PoE
Electrical/ Mechanical Fittings	Fit mechanical or electrical components to furniture.	PO/PoE
Rectification /Rework	Carry out rectification or rework. This includes assessing and repairing items.	PO/PoE
Safe Handling and Storage	Pack and store products and components following standard operating procedures. Understand and follow procedures for safe handling of products.	PO/PoE

Bed Manufacturers requirements

Bed Manufacturers must take **4** of the following requirements, at least **2** must be **Group A**

Mattress Making

Group A		Assessed by
Spring Making	Prepare work area, set up machine for appropriate spring type and size and produce springs to the required specification.	PO/PoE
Quilting	Prepare for and carry out mattress quilting operations. Understand and operate quilting machines.	PO/PoE
Tape Edging	Prepare work area, set up machinery, select materials and carry out tape edging. Tape edging is usually the final process in mattress making. It involves closing the mattress up by the application of a tape using a sewing machine.	PO/PoE
Hand Side Stitching	Identify and sort components and sew materials to specification.	PO/PoE
Group B		Assessed by
Panel Cutting	Prepare and cut fabric and components used for panels. Understand and use any machinery used in this process.	PO/PoE
Sewing Borders /Labels	Identify and sort components. Sew materials to specification.	PO/PoE
Mattress Assembly	Assemble mattresses using appropriate components such as spring units and fillings to agreed standards. This will involve the use of equipment such as a glue spray and staple guns.	PO/PoE
Tufting	Tuft mattresses to appropriate pattern and standard.	PO/PoE

Divan and Headboard Making		
Group A		Assessed by
Sewing	Produce sewn / seamed components by hand and through the use of machinery.	PO/PoE
Headboard Upholstery	Upholster headboards including pleats, deep buttoning, ruching and fluting.	PO/PoE
Upholstery	Prepare, cut and apply upholstery materials, trim and finish divans.	PO/PoE
CNC Routing	Prepare, set up, operate and maintain computer numerically controlled (CNC) machinery to produce shaped headboards.	PO/PoE
Group B		Assessed by
Wood Machining	Prepare, set up, operate and maintain machinery to produce wood components.	PO/PoE
Laying and Cutting Fabrics	Prepare and cut fabric and components.	PO/PoE
Frame Making	Prepare and assemble frames using jigs.	PO/PoE
Drawer Making	Upholster drawer fronts, prepare and assemble drawers.	PO/PoE
Ottoman / Adjustable Bed Frames	Produce ottoman or adjustable beds ensuring the mechanisms are correctly attached and in working order.	PO/PoE

Modern Upholsterer requirements

Modern Upholsterers must take **5** of the following requirements, at least **2** must be **Group A**

Group A		Assessed by
Cut Fabrics and Components	Prepare and cut fabric and components used in upholstery.	PO/PoE
Frame Construction	Construct upholstery frames to specification. Understanding the methods used to construct frames.	PO/PoE
Sewn / Seamed Components	Produce sewn / seamed components by hand and through the use of machinery.	PO/PoE
Suspensions and Foundations	Select materials for suspensions including springs, pocket springs, sprung units and webbing. Apply these to frames using appropriate modern or traditional methods, tools and equipment.	PO/PoE
Upholstering	Measure and cut fabric, fit, apply and finish top covers including fluting, pleating and buttoning.	PO/PoE
Loose Covers	Cut, sew and fit loose covers to specification.	PO/PoE
Repair	Repair joints and frame ready for re-upholstery and revive and polish show-wood frame.	PO/PoE
Group B		Assessed by
Jigs and Templates	Use and maintain jigs and templates. Jigs are used to ensure repeatability and accuracy in the production of furniture. These can be hand held or mounted on workbenches.	PO/PoE
Produce Templates	Determine details of templates from specifications, mark out, measure dimensions and cut templates using appropriate tools and equipment.	PO/PoE

Group B		Assessed by
Resolve Faults in Leather	Deal with scuffs, scratches, stains, burn marks, water marks and discolouration in leather.	PO/PoE
Filling Materials	Select and fix filling materials. Understand different types and fixing methods.	PO/PoE
Fit Mechanical or Electrical Components	Assemble, fit and quality assure components.	PO/PoE
Cushions and Padded Items	Measure and cut fabric; sew components to produce scatter, box and bolster cushions.	PO/PoE
Frame Finishes	Finish and polish show-wood frames, apply stains, sealers basecoats and finishes.	PO/PoE
Trimmings and Finishings	Position and fix trimmings and finishings. This includes castors, valances, borders, skirts, dust covers and feet and legs.	PO/PoE
Strip Down Furniture	Strip back existing upholstery to frames. Understand when and how to retain original foundation work	PO/PoE

Furniture Finisher requirements

Furniture Finishers must take all **5** of the following skills.

Preparation		Assessed by
Requirements	Analyse and agree finishing requirements following organisational procedures. A customer can be internal or external to the organisation.	PO/PoE
Prepare furniture for finishing	Prepare hand crafted or production furniture for finishing this will include sanding, grain brushing, repair, stripping and general surface preparation.	PO/PoE
Finishing		Assessed by
Finishing Applications	Apply stains, sealers, primers, oils, polishes, varnishes, waxes, lacquers and finishing coats to furniture. Finish furniture by spraying.	PO/PoE
Colour Match	Identify and carry out basic colour matching to organisational standards.	PO/PoE
Decorative & Specialist Effects	Create decorative effects or specialist finishes on furniture.	PO/PoE

Fitted Furniture Installer requirements

Installers must take **all 9** mandatory skills and **2** of the **optional** skills.

Mandatory

Prep		Assessed by
Transporting & Handling of Materials	Ensure the safe transportation and handling of installation equipment and materials. The correct type and quantity of installation equipment and materials have to be located and then transported so that they arrive at the location of the installation in good order.	PO/PoE
Installation		Assessed by
Prepare Location	Prepare location for assembly and placement of furniture. This involves making the assembly and placement area ready for work and preparing the furniture components for assembly.	PO/PoE
Measure and Mark Out	Measure and mark out materials to specification.	PO/PoE
Power Tools & Hand Tools	Set up and operate tools used to assemble furniture. Understand the tools used within working area and which specific job they are used in.	PO/PoE
Assembly	Assemble components of fitted furniture and understand the sequence of assembly and why this is important.	PO/PoE
Installation	Install furniture on location to specification. This includes scribing, fixing and securing of furniture using correct fixings relating to foundation secured to etc., adaptations to non- standard situations to specification (i.e., pipe box, sockets, gas meter).	PO/PoE
Post Installation		Assessed by
Re-instate Location	Re-instate a location after assembly and placement of furniture. This involves confirming the end of placement, ensuring all resources are cleared and maintaining customer liaison.	PO/PoE

Post Installation		Assessed by
Customer Service	Develop customer relationships. This includes building customer confidence in the level of service provided, meeting the ongoing needs and expectations of customers and developing relationships between customers and your organisation.	PO/PoE
Rectification/ rework	Carry out rectification or rework. This includes changing hinges and handles. Identify snags and awareness of where to seek help and guidance.	PO/PoE
Optional		
Installation		Assessed by
Gluing	Apply adhesives to components and understand types, methods and processes involved in gluing.	PO/PoE
Cut Outs	Complete standard cut-outs in work surfaces for general appliances such as taps, hobs and sinks. This covers using a template, cutting out and finishing the area.	PO/PoE
Cramping	Position components and apply cramps to ensure products are positioned securely to specification.	PO/PoE
Sanding	Sand wooden work tops, trims, cornices and laminate edgings. Understand grit sizes and the process for sanding.	PO/PoE
Veneers & Laminates	Apply edging tape to laminate worktops to specification.	PO/PoE
Jigs & Templates	Use and maintain jigs and templates for furniture installation. Jigs for example hinges and templates for example sinks and work tops.	PO/PoE
Joints	Cut and join components on site. This could include work top jointing, up-stand, cornices and trims.	PO/PoE
Fittings	Prepare and assemble components to specification, finishing and checking the assembly conforms to specifications.	PO/PoE

Installation		Assessed by
Electrical / Mechanical Fittings	First fit mechanical or electrical components to furniture.	PO/PoE
Finish composite worktops	Finish work tops to specification following manufacturers' instructions.	PO/PoE

Furniture Restorer requirements

Restorers must take **all 8** mandatory skills and **1** of the optional skills

Mandatory

Preparation		Assessed by
Customer Service	Agree the requirements, scope of the work and the budget with the customer. Set expectations with the customer.	PO/PoE
Assessment	Assess items of furniture for repair in order to produce a condition and options report.	PO/PoE
Requirements	Evaluate and specify restoration requirements. Develop a plan for the restoration work.	PO/PoE
Research	Carry out research to understand the history of furniture and the different periods.	PO/PoE
Restoration		Assessed by
Repair & Restore	Repair structural components. Replicate and restore components.	PO/PoE
Basic Finishing	Prepare existing and newly restored surfaces and finish furniture using basic finishing methods.	PO/PoE
Finishing		Assessed by
Reporting	Write a report on the work that has been carried out to include sketches and photographs of the process.	PO/PoE
Recommendations	Provide the customer with relevant aftercare and instructions and recommendations for future use and handling.	PO/PoE

Optional		
Specialist		Assessed by
Decorative Effects	Re- create decorative effects on furniture.	PO/PoE
Re-upholstery	Reupholster structural and decorative elements of furniture. Ensure you use appropriate fabrics.	PO/PoE
French Polishing	French polish furniture using traditional methods to a glass finish.	PO/PoE

Modern Furniture Service Repairer requirements

Modern Furniture Service Repairers must take all **4** mandatory skills and **3** of the optional skills.

Mandatory

Preparation		Assessed by
Assessment	Carry out an assessment of the fault. Assess and specify requirements for work to be carried out and agree with customers.	PO/PoE
Customer Service	Develop customer relationships. This includes building customer confidence in the level of service provided, meeting the ongoing needs and expectations of customers and developing relationships between customers and your organisation.	PO/PoE
Sign off		Assessed by
Recommendations	Provide customers with relevant aftercare and instructions and recommendations for future use.	PO/PoE
Report	Complete reports on the work carried out.	PO/PoE

Optional

Repair		Assessed by
Upholstery	Repair upholstery faults including fabrics, frames, fillings, stitching, scratches, scuffs, tears, holes, seam issues, discolouration and colour loss, arms, collapsed surfaces and springs.	PO/PoE
Furniture	Repair furniture faults including cosmetic, structural, veneers, foil and laminated surfaces.	PO/PoE
Beds and mattresses	Repair beds and mattress faults including broken frames, replacing tufts, damaged stitching and mattress settlement.	PO/PoE
Flat pack	Repair flat pack furniture faults including cosmetic and structural.	PO/PoE

Repair		Assessed by
Mechanisms and fittings	Repair/replace mechanism and fittings faults including lifting mechanisms, recliners and electrical components.	PO/PoE
Leather repairs	Repair scuffs, scratches, stains, burn marks, water marks and discolouration in leather.	PO/PoE

Foam Convertor and Upholstery Cushion Interior Manufacturer requirements

Foam Convertor and Cushion Manufacturers must take **all 5** mandatory skills and **4** optional

Mandatory

Preparation		Assessed by
Raw materials	Identify and explain characteristics of raw materials.	PO/PoE
Product Specifications	Understand product specification instructions and diagrams.	PO/PoE
Production Process & Flow Requirements	Prepare, arrange and coordinate material flow through identified work stations following required production route.	PO/PoE
Finishing		Assessed by
Rectification / Rework	Identify faulty products and undertake rectification process.	PO/PoE
Safe Handling and Storage	Pack and label products in the required format according to customer specification.	PO/PoE

Optional

Sewn Case Production		Assessed by
Lay Up, Measure & Mark Out	Operate manual and / or automatic fabric spreading equipment using safe systems of work.	PO/PoE
Cut Shapes	Cut shapes using manual hand held cutting equipment and / or CNC fabric cutter according to safe systems of work.	PO/PoE
Prepare Cut Parts & Sew Components	Prepare cut components ready for sewing and sew by hand through use of sewing machinery.	PO/PoE

Sewn Case Production		Assessed by
Prepare Cases	Prepare cases in line with filling requirements.	PO/PoE
Fill Cases	Fill cases through use of manual and / or automated filling methods.	PO/PoE
Finishing	Close filling opening to required standards through use of closing machinery to prevent filling migration.	PO/PoE
Foam Cutting		Assessed by
Operate CNC Machinery	Prepare, set up and operate foam CNC & profiling machinery using safe systems of work.	PO/PoE
Operate Large Cutting Machinery	Prepare, set up and operate vertical and horizontal cutting machines using safe systems of work.	PO/PoE
Operate Small Cutting Machinery	Operate small cutting and shaping machinery using templates and jigs to ensure repeatability and accuracy of component parts.	PO/PoE
Foam assembly		Assessed by
Prepare Components	Prepare all cut components along with required drawings ready for assembly.	PO/PoE
Automated Fabrication	Operate automated fabrication line to required operating procedures.	PO/PoE
Manual Fabrication	Assemble cut parts through correct use of sprayed adhesive equipment and assembly techniques to the required tolerances and quality standards.	PO/PoE

Wood Machinist requirements

Wood Machinists must take **all 4** mandatory skills and **4** of the optional

Mandatory

Essential		Assessed by
Measure and Mark Out	Measure and mark out materials to specification within the acceptable tolerances following standard operating procedures.	PO/PoE
Tooling	Select, prepare and maintain woodmachining tooling.	PO/PoE
Cutting	Prepare, set up and operate cutting wood machinery.	PO/PoE
Planing	Prepare, set up and operate planes. This includes surface planer and thicknesser (can be a combined machine) and four sided planer and moulder (for planed all round).	PO/PoE

Optional

Pre-Machining		Assessed by
Calibrating	Calibrate measuring equipment, keep tools and equipment clear of debris and dirt and ensure tools are kept sharp.	PO/PoE
Jigs and Templates	Use and maintain jigs and templates for furniture production. Jigs are used to ensure repeatability and accuracy in the production of furniture. These can be hand held or mounted on workbenches.	PO/PoE
Profiling	Prepare, set up and operate profiling wood machinery. This includes vertical spindle moulder (straight work), four sided planer and moulder, high-speed router, double-end tenoner, wood turning lathe, copying lathe, linear shaper, rotary shaper machines.	PO/PoE

Machining		Assessed by
Boring	Prepare, set up and operate boring wood machinery. This includes single-head machine and multi-head machine.	PO/PoE
Sanding	Sand materials for preparation prior to assembly, post-assembly and de-nibbing. Understand grit sizes and the process of sanding. This includes the use of wide belt sander, overhead narrow belt sander, disc sander, bobbin sander, finisher and profile sander.	PO/PoE
Edge Banding	Carry out the edge-banding process following standard operating procedures. This includes, edge-banding by hand, colour matching, timber and PVC lippings, calibration and finishing techniques.	PO/PoE
Operate Machinery and Equipment	Operate woodworking machinery and equipment to meet company requirements. Prepare tools and equipment including tooling technology and calibration of measuring equipment.	PO/PoE
Joints	Prepare, set up and operate wood machinery to produce jointed wood and wood-based products. This includes chisel morticer, chain morticer, slot morticer, dovetailer, vertical spindle moulder, stair router, single-end tenoner, double-end tenoner, round-end tenoner, dowler and router.	PO/PoE
Finishing		Assessed by
Assembly	Assemble components of furniture following standard operating procedures. Understand the sequence of assembly and why this is important.	PO/PoE

Furniture CNC Specialist requirements

Furniture CNC Specialists must take **all 5** mandatory skills and **3** of the optional

Mandatory

Essential		Assessed by
Measure and Mark Out	Measure and mark out materials to specification within the acceptable tolerances following standard operating procedures.	PO/PoE
Tooling	Select, prepare and maintain CNC/NC tooling.	PO/PoE
Operate CNC/NC Machinery and Equipment	Operate CNC/NC machinery and equipment to meet company requirements. Prepare tools and equipment including tooling technology and calibration of measuring equipment.	PO/PoE
CNC/NC Processing	Understand the principles of CNC/NC processing. This includes the capabilities of machinery used, how the machinery operates, principles of machinery and the manufacturing processes used in your organisation.	PO/PoE
Mechatronics System Principles and Fault Finding	Understand mechatronics systems principles and fault finding. This includes diagnosing simple faults, understanding total production maintenance, engineered systems, and the basic principles of pneumatic, hydraulic, mechanical and electrical actuation systems.	PO/PoE

Optional

Preparation		Assessed by
Methods of Measurement	Inspect and use measuring equipment, keep tools and equipment clear of debris and dirt.	PO/PoE
Jigs and Templates	Use and maintain jigs and templates for furniture production. Jigs are used to ensure repeatability and accuracy in the production of furniture. These can be hand held or mounted on workbenches.	PO/PoE

Preparation		Assessed by
Sanding	Sand materials for preparation prior to assembly, post-assembly and de-nibbing. Understand grit sizes and the process of sanding. This includes the use of wide belt sander, overhead narrow belt sander, disc sander, bobbin sander, linisher and profile sander.	PO/PoE
Edge Banding	Carry out the edge-banding process following standard operating procedures. This includes colour matching, timber and PVC lippings, calibration and finishing techniques.	PO/PoE
Planing	Prepare, set up and operate planes. This includes surface planer and thicknesser (can be a combined machine) and four sided planer and moulder (for planed all round).	PO/PoE
Joints	Prepare, set up and operate CNC/NC machinery to produce jointed wood and wood based products. This includes chisel morticer, chain morticer, slot morticer, dovetailer, vertical spindle moulder, stair router, single-end tenoner, double-end tenoner, round-end tenoner, dowler and router.	PO/PoE
Assembly	Assemble components of furniture following standard operating procedures. Understand the sequence or assembly and why this is important.	PO/PoE