

Assessment 1

Course: TCJ 154

Qualification: Samoa Certificate II – Carpentry and Joinery

Pass criteria: Competent

Assessed learning outcomes: LO1, LO2, LO4 and LO5

Learning outcome 1: Demonstrate knowledge of the setting up and operation of fixed machinery.

Range: (tools) Surface planer (buzzer), thicknesser (panel planer), bench saw, band saw, bench grinder, drill press, horizontal borer, compound mitre saw, wood lathe.

Performance criteria:

- 1.1 Identify and describe the machine's purpose, advantage and limitations in terms of the manufacturer's instruction for use.
- 1.2 Describe the correct setup and safe guarding of different fixed machines.
- 1.3 Describe the safe operations of different fixed machinery.
- 1.4 Identify and describe items of personal protective equipment for use with different fixed machinery.

Range: (PPE) Eye protection, ear protection, footwear, respiratory protection.

Learning outcome 2: Demonstrate procedures for the setting up of fixed machines.

Range: (tools) Any four of – surface planer (buzzer), thicknesser (panel planer), bench saw, band saw, bench grinder, drill press, horizontal borer, compound mitre saw, wood lathe.

Performance criteria:

- 2.1 Properly isolate fixed machinery from power supply throughout the set up procedures.
- 2.2. Set up different machines in accordance with job requirements, supervisor's instructions and workplace practices.

Learning outcome 4: Demonstrate knowledge of maintenance requirements for fixed machinery.

Performance criteria:

- 4.1 Describe maintenance requirement for cutting edges, saw teeth, or grinder wheels in accordance with work place practices.
- 4.2 Describe routine maintenance requirements of fixed machinery in accordance with manufacturer's instructions and work place practices.

Learning outcome 5: Prepare a cutting list for a timber project.

Range: (tools) Surface planer (buzzer), thicknesser (panel planer), bench saw, band saw, bench grinder, drill press, horizontal borer, compound mitre saw, wood lathe.

Performance criteria:

- 5.1 Identify project components from working drawings and job specifications.
- 5.2 Verify cutting lists are in accordance with working drawings and job specifications.

Assessment Part 1

Required resources:

(all documents to be provided to learners with assessment instructions in hard copy or online)

- Job plans and specifications
- Working drawings
- Supervisor's instructions
- Job requirements
- Workplace practices
- Manufacturers manuals of all available machinery in workshop
- Maintenance Requirements: Cutting Edges, Saw teeth, Grinder Wheels

Assessment Instructions

In the workshop we have a range of stationary machinery. Each has manufacturer's instruction manual. We will be working-on-building a project. Your first project is about building a bookcase. Your supervisor has provided you with the relevant plans, drawings and specifications to assist you when reading and interpreting the project components. But before you go ahead and carry out this task you will have to identify the machinery that will help you complete and carry out the task. You also need to demonstrate understanding of the machinery you will be using so you need to state the machinery's purpose, what you will use the machine for in accordance to completing your project, the advantages of using the specific machinery, the reasons why a machine is appropriate, and its limitations.

Safety is of the uttermost priority; therefore, you will need to identify personal protection equipment (PPE) and describe why you have selected these PPE's for operation of your selected machinery.

The machinery's set up is the next important step. It is important because of the convenience, working environment, workplace practices, and the safeguard procedures and you will need to demonstrate your competence of the procedures and how fixed machines need to be set up before you operate them. As a competent carpenter and joiner, you must be able to describe or demonstrate how to properly isolate each machine from power supply during set up, which is appropriate for the job requirements, workplace practise and your supervisor instructions.

Once you have correctly described how you will set up the machines, the next step is for you to identify and describe the project components based on the working drawing and job specifications you are given, prepare a cutting list and verify it against the working drawings and job specifications.

Your task:

In the written report to your supervisor, you need to demonstrate competence and readiness for this project. You need to provide the following evidence:

1. A list of the machinery(s) you will use for the given plan and project including:
 - 1.1 Description why you chose those machines, its advantages and limitations.
 - 1.2 Description of the correct set up and safeguards of each machine.
 - 1.3 Description of how each machine should be safely operated.
 - 1.4 Description of the correct PPE you need to use when working with each machine.
2. The setting up process of the machinery including:

- 2.1 Description or video demonstrating using a prop instead of the machine, of how you will properly isolate each machine from power supply during set up.
 - 2.2. Description of the setup process for each machine and explanation how it is appropriate for the job requirements, the workplace practices and your supervisor instructions.
3. Appropriate cutting list including:
 - 3.1 A list of all project components.
 - 3.2 A cutting list you have prepared based on the information from the working drawing, plans and job specifications.
 - 3.3 Explanation how you are going to verify the cutting list in accordance with the working drawings and job specifications to ensure is appropriate.

Assessment Part 2

Assessment Instructions

Using machinery for woodwork is a work of art and requires, safety, precision, workmanship and craftsmanship altogether and most of all execution. In order to produce a quality product, you must have well maintained machinery to execute the required tasks. In this part of the job you were given, you need to show knowledge of maintenance requirements for cutting edges, saw teeth, or grinder wheels in accordance with our workshop practices. As you are aware routine maintenance is carried for these parts of the stationed machinery in accordance with manufacturer's instructions and workshop practices and you will need to demonstrate your knowledge of these instructions and practices.

In part 1 of this assessment, you identified different machinery you need to carry out your project. Now you will need to ensure that the selected machinery is properly maintained. You should be familiar with manufacturer maintenance requirements and best work practices. Before using the machines demonstrate your knowledge in maintaining the saw teeth of the cutting blades, cutting edges and grinder wheels.

Your task:

In the written report to your supervisor, you need to demonstrate knowledge and competence of maintenance requirements for the machines you will be using. You need to provide the following:

- 1.1 Description of maintenance requirements for the cutting edges, saw teeth, or grinder wheels of each of your selected machines in accordance with workplace practices.
- 1.2 Description of the routine maintenance requirements of each of the machines you have selected in accordance with manufacturer's instructions and work place practices.

Assessment rubric part 1

A list of the machinery(s) selected for use

PC	Criteria	C	NYC
PC1.1	Choice of machinery	All required machinery for the job is selected and is appropriate. Clear description of purpose, advantages and limitations of each machine is included.	Some but not all of machinery for the job selected are appropriate. and/or Description of purpose, advantages and limitations is not clear or not provided for each machine.
PC1.2	Machinery set up	Correct and clear description of how each of the required machines for the job is set up is provided.	Not all descriptions of how each of the required machines for the job is set up is provided. and/or Some descriptions are correct and clear.
	Machinery safeguards	All safeguards for each machine are correctly identified and clearly described.	Some safeguards for each machine are correctly identified and described. and/or All safeguards for each machine are correctly identified but not clearly described.
PC1.3	Operating machinery safely	Clear description of how each machine should be safely operated is provided including placement and secure positioning of material.	Some of the machines have clear description how to be safely operated including placement and secure positioning of material. and/or Description is not clear and/ or missing placement and secure positioning of material.
PC1.4	Appropriate PPE	PPE for each machine clearly identified and its purpose and use described.	PPE for some machines clearly identified and its purpose and use described. and/or ALL PPE is identified but purpose and use not clearly described for each one.

The setting up process of the machinery

PC	Criteria	C	NYC
PC2.1	Machinery isolation from power	Clear description or video of how each machine is correctly isolated from power supply during set up is provided.	Description or video of some of the machines how correctly they are isolated from power supply during set up is provided and clear. and/or Description or video of each machine how correctly is isolated from power

			supply during set up is provided but not all clear.
PC2.2	Machinery set up	Description of the setup process for each machine is clearly provided including all required steps. Explanation of how setup for each machine is appropriate for job requirements and workplace practices is clear.	Description of the setup process for all machines is provided but some steps are missing or unclear. and/or Explanation for some of the machines of how setup is appropriate for job requirements and workplace practices is not clear and/or only provided for some of the machines.

Cutting list

PC	Criteria	C	NYC
PC5.1	Components	All project components are clearly stated according to plans and specifications.	Not all project components are stated and/ or all project components are provided but unclear according to the plans and specifications.
PC5.2	Cutting list	Complete cutting list provided, as required by working drawings and job specifications.	Incomplete cutting list provided and/ or some of it is unclear and/or not fit for working drawings and job specifications.

Assessment rubric part 2

PC	Criteria	C	NYC
PC4.1	Maintenance of parts	All maintenance requirements for the cutting edges, saw teeth or grinder wheels of all machines are correctly and clearly provided in accordance with workplace practices.	Not all maintenance requirements for the cutting edges, saw teeth or grinder wheels for all machines are correctly and clearly provided in accordance with workplace practices and/or description of maintenance requirements incorrect or incomplete.
PC4.2	Routine maintenance requirements	Routine maintenance requirements for all machines are clearly described and in accordance with manufacturer's instructions and workplace practices.	Routine maintenance requirements for some machines are clearly described and in accordance with manufacturer's instructions and workplace practices. and/ or routine maintenance descriptions are provided for all machines but not in accordance with manufacturer's instructions and workplace practices.

Assessment 2

Course: TCJ 154

Qualification: Samoa Certificate II – Carpentry and Joinery

Pass criteria: Competent

Assessed learning outcomes: LO3, LO6, an LO7

Learning outcome 3: Demonstrate the correct use of fixed machines for construction trades projects.

Range: (tools) Any four of – surface planer (buzzer), thicknesser (panel planer), bench saw, band saw, bench grinder, drill press, horizontal borer, compound mitre saw, wood lathe.

Performance criteria:

- 3.1 Demonstrate the correct use of fixed machines and personal protective equipment in accordance with supervisor's instructions and workplace practices.
- 3.2 Properly machine material in accordance with job specifications.
- 3.3 Clean and clear machines and work area after use in accordance with workplace practices.

Learning outcome 6: Mark out, cut and machine components for timber projects.

Performance criteria:

- 6.1 Accurately mark out and cut project components to size in accordance with working drawings and job specifications.
- 6.2 Finish the surfaces of components in accordance with working drawings and job specifications.

Learning outcome 7: Assemble and finish timber projects.

Range: (practices) Workplace, tools, plant and equipment are cleaned, and tools, plant and equipment are stored in accordance with workplace practice.

Performance criteria:

- 7.1 Assemble project components in accordance with working drawings and job specifications.
- 7.2 Finish projects in accordance with working drawings and job specifications.
- 7.3 Safely complete all operations in accordance with workplace practices.
- 7.4 Clean and store all workplace tools, plant, and equipment in accordance with work place practices.

Time for completion: 1hr

Required resources:

(all documents to be provided to learners with assessment instructions in hard copy or online)

- Job plans and specifications
- Working drawings

- Supervisor's instructions
- Job requirements
- Workplace practices
- Manufacturers manuals of all available machinery in workshop
- Maintenance Requirements: Cutting Edges, Saw teeth, Grinder Wheels
- Wood for cutting
- Required machines
- Required tools and equipment

Assessment Instructions

So far you have been working on and demonstrating your knowledge on the different stationed machinery in our workshop. These machineries make woodworking a living art for you, and that art will now be brought to life through the practical that you will complete in the workshop.

While competing the project by making the book shelve you will be demonstrating your competency in how you:

- safely use the station machinery;
- follow the workshops safety practices, plans and drawing interpretations;
- read the specifications and understand them, and extract that knowledge needed to size materials for the job;
- clean and clear machines and work area after use in accordance with workplace practices.

By building the bookshelf you will demonstrate how you accurately mark out and cut timber, finish the surfaces of these timber components according to plans and specifications. You will also demonstrate how you safely assemble all the project components and apply finishing requirements, according to drawings and job specifications. At the completion of the project, you must also demonstrate how to clean and store all workplace tools, plants and equipment's in accordance with workplace practices.

Task:

When working in the workshop to build the book shelf you need to demonstrate competence of the following:

1. Use and operation of fixed machinery.
2. Wearing the correct personal protection equipment in accordance with supervisors' instructions and workplace practices.
3. Properly prepare machine material in accordance with job specifications.
4. Accurately mark out and cut project components according to plans and specifications.
5. Apply finishes to the surfaces of components according to plans and specifications.
6. Assemble project components.
7. Finish the project in accordance with working drawings and job specifications.
8. Clean and store all workplace tools, plants and equipment's in accordance with workplace practices.

Assessment Rubric

PC	Criteria	C	NYC
PC 3.1	Set up of machines	All machines are set up and correctly isolated from power supply.	Some machines are set up or not all are properly isolated from power supply.
	Use of machines	All machines are used correctly and safely in accordance with supervisors' instructions and workplace practices.	Some machines are used correctly and safely or not all are used in accordance with supervisors' instructions and workplace practices.
	Use of safeguards	All safeguards/ push sticks are utilized/ attach properly.	Some safeguards and push sticks are not utilized and attached properly.
	Managing waste	Waste during operation is cleared timely.	Not all waste during operation is cleared or but not timely.
	Use of PPE	Appropriate PPE is correctly used for all machines at all times.	Not all PPE is correctly used for all machines or not at all times.
PC 6.1	Marking	All project components/ materials are correctly marked in accordance with working drawings and job specifications.	Not all project components are correctly marked in accordance with drawings and job specifications.
	Use of tools	Marking tools are correctly used.	Some marking tools are used correctly.
PC 3.2 & PC 6.1	Placement of materials	All materials are securely and firmly positioned on/ in the machinery.	Some materials are not secured and positioned on/ in machinery correctly.
	Cutting	All materials and components are cut to size according to drawings and specifications.	Some materials and components are not cut to size according to drawings and specifications.

PC7.1	Assembly	All project components are assembled according to job specifications and drawings.	Not all project components are assembled according to job specifications and drawings.
PC 6.2	Finishing of surfaces	All components surfaces are finished according to the work drawings and specifications.	Not all components surfaces are finished according to the work drawings and specifications.
PC 7.2 & 7.3	Operations completion	All operations are completed safely and in accordance with work place practices.	Some operations were completed safely and in accordance with workplace practices.
	Project completion	The entire project is completed in accordance with working drawings and job specifications.	Some parts of the project were not completed in accordance with working drawings and job specifications.
PC 3.3 & PC 7.4	Workplace maintenance	Working area and all used tools, plants/ machinery and equipment's are cleared, cleaned and stored according to workplace practices.	Some of the used tools, plants/ machines, equipment and/ or working area were cleared and cleaned. and/or not all used tools and equipment was stored according to workplace practices.