

Prerequisites: All personnel undertaking this assessment must have previously completed the following;

- Read Laser Cutter Risk Assessment, **Task ID. 37000** and associated Standard Operating Procedure, **SP-092**,
- Complete local Workshop Induction.

Competency: Utilize a Laser Cutter to cut material within a workshop in accordance with occupational health and safety standards.

Operations: This assessment should take place in any EAIT Faculty Workshop equipped with a Laser Cutter. The assessor is required to assess all aspects of the competency regarding the following operations;

1. Pre-operational checks,
2. Operation\Startup of equipment and cut suitable material,
3. Housekeeping.

Instructions: Each intended user of the equipment is required to complete an individual competency assessment, detailed in Section 1 below. Each element is to be assessed and the results recorded below. The actions used and evidence gained to assess competency (listed in Appendix A) are recorded against each criteria. Users are then required to answer the questions in Section 2 and then sign and date this document.

Notes:

Evidence of competency allows the user access to the equipment only for the tasks assessed. Proof of competency does not permit the assessment of untrained personnel's competency using this equipment. Only authorised persons are permitted to assess the competence of others in this process. Competent users will be required to be re-assessed on any related changes to the operating procedures of this equipment.

1. Operational Assessment

Element of competency	Performance criteria	Operation /Scenario	Self-assessment		Assessor review		Action/evidence (Refer to Appendix A)
			Competent	Not yet competent	Competent	Not yet competent	
Pre Operational Checks	Locates Laser Cutter GPO and ensure that the equipment is not tagged out of service.	1					
	The individual must be able to correctly identify and describe: Air assist system	1					
	Water chiller unit (if applicable)	1					
	Exhaust system	1					
	Laser start key, ask workshop staff	1					
	Selects and fits appropriate PPE.	1					

COMPETENCY ASSESSMENT: Laser Cutter

Element of competency	Performance criteria	Operation /Scenario	Self-assessment		Assessor review		Action/evidence (Refer to Appendix A)
			Competent	Not yet competent	Competent	Not yet competent	
Operation of Laser Cutter	Select a suitable piece of cardboard and demonstrate the following process:	2					
	Position cardboard on laser bed and move laser head to start position.	2					
	Set correct focal distance using measuring jig.	2					
	Select geometry that you want to cut/engrave on the computer. Finish all pre operation checks then send file to laser cutter.	2					
	Perform laser cut/ engrave by following specific operating guidelines.	2					
Shut down Machine	Follows correct shut down and clean up procedure.	3					

2. Review Questions

Answer the following questions in the spaces provided. If you have any questions please ask the assessor. You may refer to the Risk Assessment, Standard Operating Procedure (SOP) or your notes if required. Once complete, insert your name and details in the space provided and return the completed form to the assessor.

2.1 Always make sure you supervise your laser cut from start to finish. True or False & Why?

2.2 Why should you wear the laser safety glasses?

2.3 What are the materials you must not laser cut with this laser cutter?

2.4 The lasers maximum ply or timber thickness capacity to cut is 3mm, but is not a preferred option of material. True or False & Why?

2.5 What is the correct format to save file in?

2.6 Always draw your material plate first (1:1) then place geometry inside when making your file, remember your materials x and y value, we do this to guarantee correct scale when opening DXF file in laser program. True or False?

Authorisation					
Employee\Student name	Employee\ Student signature	Date	Unit	Assessor name	Assessor signature

Appendix A

Possibilities for Action items		Possibilities for evidence	
A	Watch video	1	Direct observation of performance during work
B	Review procedures	2	Direct observation of performance during simulation
C	Attend central training	3	Return demonstration during training
D	Observe other staff	4	Completed end product, form or document
E	On the job training	5	Verbal assessment
F	Be mentored by person with these skills	6	Written assessment
G	Role play with other staff	7	>1 year Post-training trade experience
H	Online course	8	Other – Provide details
I	Technical trade training		
J	Other – Provide details		