

Risk Assessment - Laser Cutter - #205

Risk Assessment performed on behalf of Leicester Hackspace Ltd 08833126

This risk assessment is intended to provide guidance on the risk associated with the above equipment and activities in normal use. Please also check general risk assessments for the space as a whole. Any discrepancies, errors or concerns should be raised with the directors health-and-safety@leicesterhackspace.org.uk - do not edit this assessment directly. For responsible persons and last update, see below.

Activity

Using the laser cutter



Read Instruction Manual



Ensure Adequate Ventilation



Use Appropriate Guards



Induction Required

Created by	Signed	Date
Neil Burley		31/07/26
Reviewed By	Signed	Date
Divya Pujara		31/07/26
Director sign-off	Signed	Date
Steve Gale		10/08/26
Date released	Last reviewed	Next review
19/08/26	-	August 2027

#	Identify Hazards	Who maybe Harmed	Severity	Control Measures	Likelihood	Risk Rating
1	Electric shock	User	High	All electrical equipment should be checked for electrical safety prior to use. Equipment must not be used unless they have a PAT test label on. It is the users responsibility to do a visual check of the equipment. If any defects are found (i.e. cracked casing, defect in lead etc) the equipment is not to be used, to be quarantined, safety officer informed, and a defect label attached	Low	Med
2	Misuse of equipment	User, Bystander	High	Members are inducted into the correct use of the equipment and understand associated risks. Members found to be deliberately misusing equipment may have their use of the machine restricted or revoked altogether.	Low	Med
3	Eye exposure to laser	User, Bystander	High	Covered in training/induction Close lid during operation Ensure leather skirt is in place to block reflected laser light from under lid Interlock in place to prevent laser firing with access hatch open Warning signs on access panels without interlock Required induction includes full safety training including emergency shutoff Demonstrated competence required before training signed off	Low	Med
4	Risk of fire	User, Bystander	High	Covered in training/induction Check bed and slats are clean of char and debris Only use approved materials Remove plastic coverings and any loose paper masking Any paper masking must be securely stuck down Choose appropriate settings for the material Do not cut more than one layer of material at a time Remain at the machine for the duration of the cut and use the monitor to keep an eye on the material Be aware some material may smoulder undetected (e.g. corrugated cardboard) Know how to stop the laser in case of fire Clean the bed of debris and char after each use Know where the nearest fire blanket/extinguisher is and how to use them Know how to raise the alarm in case of fire Be aware of the fire procedures posted at each exit point	Med	Med

5	Hazardous fumes	User, Bystander	Med	Covered in training/induction Monitor the air quality monitor behind the laser: stop cutting if red, proceed with caution if amber Only use approved materials - no PVC or halide containing materials, no polycarbonate Allow smoke to clear completely from the enclosure before lifting lid Stop cutting if others in the space complain of breathing difficulties	Low	Low
6	Injuries during material handling	User, Bystander	Low	Covered in training/induction Be aware of bystanders when loading and unloading the laser Be aware of potential for sharp edges and wear gloves if needed Potential for lasered materials to cause burns - allow to cool First aid kit available in kitchen area	Low	Low