Voron 3D Printer Risk assessment

This table outlines the possible risks that users of this tool should bear in mind. The risk rating, likelihood, and severity are all calculated assuming that the listed control measures are followed. If you are uncomfortable with these risks, or are not confident in your ability to use this tool safely, please do not use it.

Risk rating	Likelihood	Severity	Hazard	Who may be harmed & how	Control measures
L	L	L	Burn due to hotplate or hot-end	User - the user may have a minor burn due to the high temperature of the hotplate and hot-end of the 3D printer	<ul> <li>Signage - standard "hot surface" signage is used to indicate the surface may be hot</li> <li>Training - informing the user about how to tell if the printer is currently operating, checking the current temperature, and to avoid touching the hot plate or hot-end directly</li> <li>Equipment - first aid kit is available</li> </ul>
L	L	Н	Fire started due to hotplate or hot-end	<ul> <li>The space - the equipment and surrounding area may become damaged from a fire started by a flammable material placedon the hotplate or hot-end of the 3D printer.</li> <li>User - the user may become injured from a fire by both heat and inhalation of smoke</li> <li>Bystanders - bystanders may become injured by both heat and inhalation of smoke</li> </ul>	<ul> <li>Signage - standard "hot surface" signage is used to indicate the surface may be hot</li> <li>Training - users are instructed to not leave flammable materials on or around the 3D printer</li> <li>Supervision - active 3D printers are monitored during operation</li> <li>Equipment - fire alarms and extinguishers are installed, first aid kit is available</li> </ul>
L	L	L	Body part or cloth- ing is caught in printer mechanism	User - the user may experience injuries such as cuts and stretch or crush injuries	<ul> <li>Signage - standard "pinch point" or "crush hazard" signage is used to indicate the printers are hazardous</li> <li>Training - users are instructed to remove or secure loose clothing and long hair and to avoid placing hands nearthe 3D printer gantry mechanism</li> </ul>

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L	_	M	Hazardous gasses	Users of the room - anyone in the room may sustain injury from inhalation of haz- ardous gasses produced by heatedther- moplastics	<ul> <li>Enclosure - 3D printer is enclosed in a case to prevent hazardous gasses from escaping</li> <li>Extraction - an extraction device is installed to extract hazardous gasses from the enclosure</li> <li>Training - users are informed about which plastics produce hazardous gasses and to ensure the enclosure is closedand the extraction device operational</li> </ul>