

Activity

Operating the 3D Printer

Hazard identification

- Burn from heated platen or head
- Trap of hand / clothing in mechanisms
- Electrocution
- Fumes from ABS may cause irritation in high concentrations

Persons at risk

- Operator
- Observers

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Burn from platen or head	2	3	= 6
Trap of hand / clothing	1	2	= 2
Electrocution	4	1	= 4
Fumes	2	1	= 2

Categorising the risk level as 2 to 6 (low to moderate) shows that the potential level of risk in this activity is moderate.

Further measures are needed to reduce the risk to an acceptable level.

Control measures

Necessary control measures arising from the hazard identified of 'Burn from platen' are:

- Include appropriate training for all machine operators
- Post notices with the machine clearly identifying the hazard

Necessary control measures arising from the hazard identified of 'Trap of hand / clothing' are:

- Include appropriate training for all machine operators
- Post notices with the machine clearly identifying the hazard

Necessary control measures arising from the hazard identified of 'Electrocution' are:

- Regular inspection of power cabling to the device
- Annual PAT test of equipment

Necessary control measures arising from the hazard identified of 'Fumes' are:

- Train users to turn on ventilation when doing long print runs with ABS

Final assessment of risk

The assessed risk taking into account the implementation of the control measures listed, and adherence to the SSOW (Safe System of Work) if applicable is as follows:

Hazard identified	Severity	Probability	Risk
Burn from platen or head	2	1	= 2
Trap of hand / clothing	1	1	= 1
Electrocution	4	1	= 4
Fumes	1	1	= 1

The risk now falls into the category 'low' and is considered to be acceptable.

Authorised by	Sign:	Print:	Date:
---------------	-------	--------	-------

Revision history:

2015-06-21 KSJ Added "Fumes" to potential risks, and "head" to burns risks.