

So Make It Ltd

Standardised Risk Assessment Form - Version 1.0 Jun 2019

Date of Assessment	15/06/2019	Version	2.0
Activity	Manual Turning and Machining		
Equipment	Harrison M300 Metal Lathe	Location	Workshop
Details of activity	Turning, drilling, boring and machining operations to fabricate parts from metals and plastics.		
Induction / Role Required	YES		
Form completed by	Ed Chaney	Checked by	TBC

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 area within which this equipment or activity is based.

Any discrepancies, errors or concerns should be raised with the document authors, area specialists (e.g. admins, superusers) or trustees.

Understanding Risk Rating:

Likelihood	Risk Rating		
HIGH	MED	HIGH	HIGH
MED	LOW	MED	HIGH
LOW	LOW	LOW	MED
	LOW	MED	HIGH

Severity

Risk Rating	Action
LOW	Ensure current control measures are in place and continue with activity
MED	Control measures may be adequate, induction or supervision is advised
HIGH	Do not undertake activity without further consultation with area specialists

Identify Hazards	Who may be harmed and how	Severity	Control Measures	Likelihood	Risk Rating
Something with the potential to cause harm	Users, bystanders or particular at risk groups	Low / Medium / High	What is in place to reduce the harm or likelihood.	Low / Medium / High	Calculate from table above
Entanglement on rotating parts: workpiece, chuck, control wheels, feed screws/bars and stock bars	User's clothing or hands may become entangled causing dislocations, broken bones, loss of limbs or death. Bystander may be entangled in protruding stock bar.	HIGH	Tie back long hair. No loose clothing, gloves, scarves, ties or jewelry to be worn. Roll sleeves up. Do not use if wearing a bandage. Keep hands away from all moving parts when lathe is in operation. Never use hand-held emery cloth, files or pads to smooth or polish components. If stock bar protrudes from lathe, set up additional guarding to prevent bystander from becoming entangled. Emergency foot brake is fitted. Check brake each time before use.	LOW	MED
Contact with ejected parts.	User or bystanders may be struck by parts ejected by the lathe such as the chuck key, insecure workpieces, broken tools. Causing trauma, head and eye injuries..	HIGH	Workpiece must be properly held in the lathe. Use appropriate chuck for workpiece. Use tailstock centres whenever possible. Check rotational clearance by hand before starting lathe. Frequently check workpiece holding throughout use. Use appropriate tool, feed/speed and machining operation to reduce stress on tool, workpiece and lathe. Check tool is secure before starting lathe. Check the position of all automatic feed and thread cutting controls before starting lathe.	LOW	MED

			<p>Never leave the chuck key in the chuck. Chuck guard may prevent lathe from starting with chuck key in, or may prevent chuck key being ejected. Users and bystanders must wear eye protection or face shields.</p>		
Contact with moving parts	User may come into contact with the chuck or carriers causing trauma or crushing injuries.	HIGH	<p>Chuck guard prevents contact with chuck, ensure it is properly placed. Keep hands away from all moving parts when lathe is in operation. Emergency foot brake is fitted. Check brake each time before use.</p>	LOW	MED
Contact or ejections from accidental starting of lathe	User or bystanders may be injured if lathe starts unexpectedly. Entanglement, impact and crushing.	HIGH	<p>Use the stop button to de-energise the lathe when changing workpiece, tooling or removing swarf. Chuck guard has a safety cut-out switch. Raise chuck when lathe is stopped. Check function of chuck guard switch and power switch each time the lathe is used.</p>	LOW	MED
Persons that are not risk aware or competent using the lathe	User or bystander may be injured or killed.	HIGH	<p>Induction and user role is required to use the lathe. Trainees must be supervised. Power switch fitted with padlock. Only users with the required user role may know the code for the padlock.</p>	LOW	MED
User or bystander falls into lathe	User or bystander may be entangled, suffer impact, trauma or cuts if pushed or fallen into lathe. May cause severe injury or death.	HIGH	<p>Ensure user has enough space to operate lathe. Remove all slip and trip hazards from area. Use barriers if necessary to prevent bystanders from coming too close to the lathe</p>	LOW	MED

			or lathe user.		
Contact with ejected swarf	User or bystander may come into contact with swarf that is entangled and then ejected causing cuts or eye injury.	MED	Stop lathe and remove swarf frequently. Do not use hands User and bystanders must wear eye protection or face shields.	LOW	LOW
Contact with sharp edges	User may be cut by sharp edges, swarf or cutting tools.	MED	Take care when handling parts and tools. Never clear swarf by hand, use a brush or paper towel (do not wear gloves).	LOW	LOW
Manual handling injury when moving chuck	User may suffer back injury while lifting 3 or 4 jaw chuck	LOW	Take care when lifting and fitting chucks. Follow good manual handling techniques.	LOW	LOW
Skin irritation from fluids	User may come into contact with cutting fluids and oils which may cause skin irritation or dermatitis.	LOW	Reduce exposure to a minimum. Ensure MDS info is kept for fluids. Use barrier cream where appropriate and wash hands thoroughly after use.	LOW	LOW