

Risk Assessment Form

(This is an active document and must be maintained)



UNIVERSITY OF
CAMBRIDGE

Materials Science and Metallurgy

Date: 3rd April 2020

Supervisor of Room/Area: **Prof. Serena Best & Prof. Ruth Cameron**

Room or area: **2_014 (CCMM main lab)**
(Describe location)

Name of Assessor(s): **Wayne Skelton-Hough**

Title of Activity / Experiment / Work Area:

Use of the IsoMet low speed saw

Description of Activity / Experiment / Work Area:

Using the IsoMet low speed saw to section materials including lab glassware.

SECTION 1: Identify all significant hazards, who or what may be affected by each individual hazard and controls in place to reduce risk to a minimum.

Hazard Description	Hazard to whom or what	Controls in place to reduce risk to a minimum
Electricity	Operator	<ul style="list-style-type: none">• Inspect all electrical equipment and power cables before use and do not use any equipment that shows any signs of damage.• Ensure electrical equipment carries an up to date PAT label before using it.• DO NOT switch on any electrical equipment where the electrical components have become wet.
Hair and loose clothing	Operator	<ul style="list-style-type: none">• Ensure long hair is tied back.• Remove or secure any loose clothing or jewelry,• Wear a lab coat when using the polisher and ensure it remains fastened.

Hazard Description	Hazard to whom or what	Controls in place to reduce risk to a minimum
Rotating blade	Operator	<ul style="list-style-type: none"> • Only use diamond wafering blades. DO NOT use a toothed blade in this saw. • Keep hands away from rotating blade.
Hot sample or blade	Operator	<ul style="list-style-type: none"> • Always use coolant as instructed in the operation manual. • Do not apply too much force to the cutting blade. If the blade is struggling to cut, re-dress the blade as instructed in the manual or replace the blade. • If the blade or sample does get hot, allow to cool before handling.
Liquid spill	Operator and other lab users	<ul style="list-style-type: none"> • Consult the COSHH form and MSDS for the coolant used and clean up all liquid spills immediately.
Coolant	Operator	<ul style="list-style-type: none"> • If a coolant other than water is to be used, a COSHH form for the coolant must be completed before using the saw. • Always wear safety glasses when using the IsoMet low speed saw.

SECTION 2: Emergency Procedures

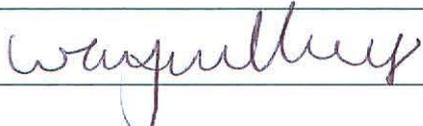
In the event of evacuation, the low speed saw must be switched off, DO NOT leave the saw running unattended. In order to shut down, switch off at the mains.

In case of sustaining a burn, the affected area should be run under cold water for at least 15 mins until pain subsides. If symptoms continue, if the burn area is greater than 1% of the body surface (an area the size of the palm of the hand) or of the burn affects the face, hands, feet or genital area, medical attention must be sought.

If the operator sustains a cut, it should be cleaned and medical attention sought if necessary.

Clean up all spills immediately.

If anyone gets coolant in their eyes, flush the affected eye(s) with cold water from the eye wash shower head for a minimum of 10 minutes and seek medical attention if symptoms persist.

Signature of Assessor(s)		Date: 03/04/2020
Signature of Supervisor		Date:

SECTION 3: Review - This assessment must be reviewed every 12 months or earlier if the basis of the original assessment is altered.

Review Date	Reviewed by (Signature)

Review Date	Reviewed by (Signature)

Change log

Change	Date	Updated by	Description
1	22/09/2017	W. Skelton-Hough	Document issued.
2	03/04/2020	W. Skelton-Hough	Need to always wear eye protection added to coolant hazard controls. Emergency action to be taken in the event of getting coolant in the eye(s) added to Emergency Procedures.