

Bishops Itchington Men's Shed

Powered tools risk assessment
analysis and training records

Hazard risk assessment for use of Wood Lathe.

- 1) Chips in eyes.
- 2) Hair or clothing caught in rotating parts.
- 3) Objects ejected from chuck.
- 4) Toxic wood dust – carcinogenic and/or allergenic woods.
- 5) Slips trips and falls may be caused by dust produced in use

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	2	6
Hair or clothes caught in chuck	3	2	6
Objects ejected	2	2	4
Toxic wood dust	3	2	6
Slips trips and falls	3	2	6

Control measures.

All users require training to learn how to use the tool safely. Training records to be kept.

Safety glasses / visors to be worn.

Long hair will to be tied back and lathe use will not be allowed when wearing loose clothing/lanyards etc.

Breathing mask will be mandatory when turning hazardous woods, the list below detailing hazards of a wide variety of woods should be consulted before starting a turning project.

Area will be vacuum-cleaned after every session.

Check everything is secure before starting motor.

Hold work piece correctly.

Work area must be periodically cleared of dust and wood chips

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	1	3
Hair caught in chuck	3	1	3
Objects ejected	2	1	2
Toxic wood dust	3	1	3
Slips trips and falls	3	1	3

Hazard risk assessment for use of Belt Sander.

- 1) Chips in eyes.
- 2) Hair or clothing caught in rotating parts.
- 3) Objects ejected.
- 4) Toxic wood dust – carcinogenic and/or allergenic woods.
- 5) Slips trips and falls may be caused by dust produced in use

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	2	6
Hair or clothes caught in chuck	3	2	6
Objects ejected	2	2	4
Toxic wood dust	3	2	6
Slips trips and falls	3	2	6

Control measures.

All users require training to learn how to use the tool safely. Training records to be kept.

Safety glasses / visor will be worn.

Long hair will be required to be tied back, and sander use will not be allowed when wearing loose clothing/lanyards etc.

Breathing mask will be mandatory when turning hazardous woods, the list below detailing hazards of a wide variety of woods should be consulted before starting a turning project.

Area will be vacuum-cleaned after every session

Check everything is secure before starting motor.

Work area must be periodically cleared of dust and wood chips

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	1	3
Hair caught in chuck	3	1	3
Objects ejected	2	1	2
Toxic wood dust	3	1	3
Slips trips and falls	3	1	3

Hazard risk assessment for use of Pillar Drill.

- 1) Chips in eyes.
- 2) Hair or clothing caught in rotating parts.
- 3) Objects ejected from chuck.
- 4) Slips trips and falls may be caused by dust produced in use

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	2	6
Hair or clothes caught in chuck	3	2	6
Objects ejected	2	2	4
Slips trips and falls	3	2	6

Control measures.

All users require training to learn how to use the tool safely. Training records to be kept.

Safety glasses / visors will be worn.

Long hair will be required to be tied back and drill use will not be allowed when wearing loose clothing/lanyards etc.

Area will be vacuum-cleaned after every session

Check everything is secure before starting motor.

Hold work piece correctly.

Work area must be periodically cleared of dust and wood chips

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	1	3
Hair caught in chuck	3	1	3
Objects ejected	2	1	2
Slips trips and falls	3	1	3

Hazard risk assessment for use of Metal Lathe.

- 1) Swarf in eyes.
- 2) Hair or clothing caught in rotating parts.
- 3) Objects ejected from chuck.
- 4) Skin Irritation from fluids.
- 5) Slips trips and falls may be caused by oil produced

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Swarf in eyes	3	2	6
Hair or clothes caught in chuck	3	2	6
Objects ejected	3	2	6
Skin Irritation from fluids	3	2	6
Slips trips and falls	3	2	6

Control measures.

All users require training to learn how to use the tool safely. Training records to be kept.

Fixed guard to be lowered over work piece, before starting the lathe.

Long hair will be required to be tied back, and lathe use will not be allowed when wearing loose clothing/lanyards etc.

Contact with skin should be kept to a minimum. Hands should be washed thoroughly after using the lathe.

Check everything is secure before starting motor.

Hold work piece correctly.

The floor surface should not be slippery and should be kept free of loose items and swarf.

Any spillage of fluids must be safely removed before work on the lathe is undertaken.

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Chips in eyes	3	1	3
Hair caught in chuck	3	1	3
Objects ejected	3	1	3
Skin Irritation from fluids	3	1	3
Slips trips and falls	3	1	3

Hazard risk assessment for use of Hand Power Tools.

- 1) Electric shock.
- 2) Hair or clothing caught in rotating parts.
- 3) Flying debris or swarf.
- 4) Noise.
- 5) Vibration
- 6) Tool jamming or binding

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	2	6
Hair or clothes caught in rotating parts	3	2	6
Flying debris or swarf	2	2	4
Noise	2	3	6
Vibration	2	3	6
Tool jamming or binding	3	2	6

Control measures.

All tools to be PAT tested, visually checked, if any defects do not use and report immediately

All users require training to learn how to use the tool safely. Training records to be kept.

Long hair will be required to be tied back and tool use will not be allowed when wearing loose clothing/lanyards etc.

Hold work piece correctly.

Wear hearing protection if above 80dB(A) or if uncomfortably loud

Select power tools with lowest vibration levels.

Minimise the time individuals use the equipment

Ensure work area is free from trailing cables, tools, materials, debris and spills.

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	1	3
Hair or clothes caught in rotating parts	3	1	3
Flying debris or swarf	2	1	2
Noise	2	1	2
Vibration	2	1	2
Tool jamming or binding	3	1	3

Hazard risk assessment for use of Bandsaw.

- 1) Electric shock.
- 2) Hair or clothing caught in rotating parts.
- 3) Flying debris or swarf.
- 4) Noise / vibration
- 5) Cuts from contact with blade
- 6) Tool jamming or binding

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	2	6
Hair or clothes caught in chuck	3	2	6
Flying debris or swarf	2	2	4
Noise / vibration	2	3	6
Cuts from contact with blade	2	3	6
Tool jamming or binding	3	2	6

Control measures.

All tools to be PAT tested, visually checked on each use, if any defects do not use and report immediately

All users require training to learn how to use the tool safely. Training records to be kept.

Long hair will be required to be tied back and tool use will not be allowed when wearing loose clothing/lanyards etc.

Hold work piece correctly.

Wear hearing protection if above 80dB(A) or if uncomfortably loud

Ensure blade is sharp to reduce vibration levels.

Ensure machine has stopped before adjustment, fixing or removing work piece.

Ensure work area is free from trailing cables, tools, materials, debris and spills.

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	1	3
Hair or clothes caught in rotating parts	3	1	3
Flying debris or swarf	2	1	2
Noise / vibration	2	1	2
Cuts from contact with blade	2	1	2
Tool jamming or binding	3	1	3

Hazard risk assessment for use of Bench / Chop Saw.

- 1) Electric shock.
- 2) Hair or clothing caught in rotating parts.
- 3) Flying debris or swarf.
- 4) Noise / vibration
- 5) Cuts from contact with blade
- 6) Tool jamming or binding

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	2	6
Hair or clothes caught in blade	3	2	6
Flying debris or swarf	2	2	4
Noise / vibration	2	3	6
Cuts from contact with blade	2	3	6
Tool jamming or binding	3	2	6

Control measures.

All tools to be PAT tested, visually checked on each use, if any defects do not use and report immediately

All users require training to learn how to use the tool safely. Training records to be kept.

Long hair will be required to be tied back and tool use will not be allowed when wearing loose clothing/lanyards etc.

Hold work piece correctly.

Wear hearing protection if above 80dB(A) or if uncomfortably loud

Ensure blade is sharp to reduce vibration levels.

Ensure machine has stopped before adjustment, fixing or removing work piece.

Use of sacrificial wooden tool to push work piece (do not use hands)

Ensure work area is free from trailing cables, tools, materials, debris and spills.

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	1	3
Hair caught in blade	3	1	3
Flying debris or swarf	2	1	2
Noise / vibration	2	1	2
Cuts from contact with blade	2	1	2
Tool jamming or binding	3	1	3

Hazard risk assessment for use of Router.

- 1) Electric shock.
- 2) Hair or clothing caught in rotating parts.
- 3) Flying debris or swarf.
- 4) Noise
- 5) Cuts from contact with blade
- 6) Tool jamming or binding

Persons at risk.

Operator.

Persons nearby.

Initial assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	2	6
Hair or clothes caught in rotating parts	3	2	6
Flying debris or swarf	2	2	4
Noise	2	3	6
Cuts from contact with blade	3	3	9
Tool jamming or binding	3	2	6

Control measures.

All tools to be PAT tested, visually checked on each use, if any defects do not use and report immediately

All users require training to learn how to use the tool safely. Training records to be kept.

Long hair will be required to be tied back and tool use will not be allowed when wearing loose clothing/lanyards etc.

Hold work piece correctly.

Wear hearing protection if above 80dB(A) or if uncomfortably loud

Ensure blade is sharp to reduce noise levels.

Ensure machine has stopped before adjustment, fixing or removing work piece.

Use of sacrificial wooden tool to push work piece (do not use hands)

Ensure work area is free from trailing cables, tools, materials, debris and spills.

Final assessment of risk

Hazard identified	Severity	Probability	Risk Factor
Electric shock	3	1	3
Hair or clothes caught in rotating parts	3	1	3
Flying debris or swarf	2	1	2
Noise	2	1	2
Cuts from contact with blade	3	1	3
Tool jamming or binding	3	1	3

Points system

Hazard Severity	Points Rating	Definition
<i>Nil</i>	1	Very minor injury, bruise, graze, no risk of disease.
<i>Slight</i>	2	Minor injury, which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.
<i>Moderate</i>	3	Temporary disability causing injury or disease capable of keeping an individual off work for three days or more
<i>High</i>	4	Causing death, serious injury or permanent disability to an individual.
<i>Very high</i>	5	Causing multiple deaths and widespread destruction eg. fire, building collapse.

Hazard Likelihood	Points Rating	Definition
<i>Remote possibility</i>	1	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions have been taken - This should be the normal state of the workplace.
<i>Unlikely</i>	2	This incident or illness might occur but the probability is low and the risk minimal.
<i>Possible</i>	3	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.
<i>Highly likely</i>	4	Will happen more often than not. Additional factors could precipitate an incident but it is still likely to happen without this additional factor.

If the work continues as it is, there is almost 100% certainty that an accident will happen, for example:

<i>Inevitable</i>	5	<ul style="list-style-type: none"> • A broken stair or broken rung on a ladder • Bare, exposed electrical conductors • Unstable stacks of heavy boxes
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Risk Factor Score	Definition	Action
1 to 4	Low	No action required
5 to 9	Moderate	Reduce risks if reasonably practicable
10 to 15	High	Risk Priority action to be undertaken
16 to 25	Unacceptable	Action must be taken IMMEDIATELY

Toxic woods

Type	Reaction	Site	Potency	Source	Incidence
Bald Cypress	Sensitizer	Respiratory	+	Dust	Rare
Balsam Fir	Sensitizer	Eyes, skin	+	Leaves, bark	Common
Beech	Sensitizer, nasopharyngeal cancer	Eyes, skin, respiratory	++	Leaves, bark; dust	Common
Birch	Sensitizer	Respiratory	++	Wood, dust	Common
Black Locust	Irritant, nausea	Eyes, skin	+++	Leaves, bark	Common
Blackwood	Sensitizer	Eyes, skin	++	Dust, wood	Common
Boxwood	Sensitizer	Eyes, skin	++	Dust, wood	Common
Cashew	Sensitizer	Eyes, skin	+	Dust, wood	Rare
Cocobolo	Irritant, sensitizer	Eyes, skin, respiratory	+++	Dust, wood	Common
Dahoma	Irritant	Eyes, skin	++	Dust, wood	Common
Ebony	Irritant, sensitizer	Eyes, skin	++	Dust, wood	Common
Elm	Irritant	Eyes, skin	+	Dust	Rare
Goncalo aves	Sensitizer	Eyes, skin	++	Dust, wood	Rare
Greenheart (Surinam)	Sensitizer	Eyes, skin	+++	Dust, wood	Common
Hemlock	Nasopharyngeal cancer	Respiratory	?	Dust	Unknown
Iroko	Irritant, sensitizer, pneumonia	Eyes, skin, respiratory	+++	Dust, wood	Common
Mahogany (Swietenia)	Sensitizer, pneumonia	Skin, respiratory	+	Dust	Unknown
Mansonia	Irritant, sensitizer, nausea	Eyes, skin	+++	Dust, wood	Common
Maple (C. Corticale mold)	Sensitizer, pneumonia	Respiratory	+++	Dust	Common
Mimosa	Nausea		?	Leaves, bark	Unknown
Myrtle	Sensitizer	Respiratory	++	Leaves, bark; dust	Common
Oak	Sensitizer, nasopharyngeal cancer	Eyes, skin	++, ?	Leaves, bark; dust	Rare, unknown
Obeche	Irritant, sensitizer	Eyes, skin, respiratory	+++	Dust, wood	Common
Oleander	Direct toxin, nausea	Cardiac	++++	Dust, wood, leaves, bark	Common
Olivewood	Irritant, sensitizer	Eyes, skin, respiratory	+++	Dust, wood	Common
Opepe	Sensitizer	Respiratory	+	Dust	Rare
Padauk	Sensitizer, nausea	Eyes, skin	+	Dust, wood	Rare
Pau ferro	Sensitizer	Eyes, skin	+	Dust, wood	Rare

Peroba rosa	Irritant, nausea	Respiratory	++	Dust, wood	Unknown
Purpleheart	Nausea		++	Dust, wood	Common
Quebracho	Irritant, nasopharyngeal cancer, nausea	Respiratory	++, ?	Dust, leaves, bark	Common, unknown
Redwood	Sensitizer, nasopharyngeal cancer, pneumonia	Skin, eyes, respiratory	++, ?	Dust	Rare, unknown
Rosewoods	Irritant, sensitizer	Skin, eyes, respiratory	++++	Dust, wood	Common
Satinwood	Irritant	Skin, eyes, respiratory	+++	Dust, wood	Common
Sassafras	Sensitizer, nasopharyngeal cancer, direct toxin, nausea	Respiratory	+, ?	Dust, wood, leaves, bark	Rare, unknown
Sequoia	Irritant	Respiratory	+	Dust	Rare
Snakewood	Irritant	Respiratory	++	Dust, wood	Rare
Spruce	Sensitizer	Respiratory	+	Dust, wood	Rare
Walnut, Black	Sensitizer	Skin, eyes	++	Dust	Common
Wenge	Sensitizer	Skin, eyes, respiratory	++	Dust, wood	Common
Western red cedar	Sensitizer	Respiratory	+++	Dust, leaves, bark	Common
Willow	Sensitizer, nausea	Respiratory	+	Dust, wood, leaves, bark	Unknown
Teak	Sensitizer, pneumonia	Skin, eyes, respiratory	++	Dust	Common
Yew	Irritant, direct toxin, nausea	Skin, eyes, cardiac	++,++++	Dust, wood	Common
Zebrawood	Sensitizer	Skin, eyes	++	Dust, wood	Rare

