





### Personal Protective Equipment Requirements

Eye Protection	Breathing Protection	Hair Protection	Hearing Protection	Hand Protection	Foot Protection	Protective Clothing	Face Protection
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Descriptor	Qualitative measures of <i>Probability</i>
Almost Certain	Is expected to occur In most circumstances
Quite Possible Conceivable	Will probably occur in most circumstances
Unusual but possible	Might occur at some time
Remotely possible	Could occur at some time
Conceivable	May occur under exceptional circumstances
Practically Impossible	Would not occur under ordinary circumstances
Descriptor	Qualitative measures of <i>Exposure</i>
Very Rare	Not a scheduled activity
Rare	Not an activity usually scheduled
Infrequent	An activity scheduled but on an infrequent basis
Occasional	A scheduled activity on an occasional basis
Frequent	A frequently scheduled activity
Continuous	An activity that is scheduled continuously
Descriptor	Qualitative measures of <i>Consequences</i>
Catastrophic	Permanent disability or Death
Disaster	Extensive injuries, with possible permanent disability
Very Serious	Medical treatment will be required (hospital)
Serious	Minor medical treatment will be required (emergency - hospital)
Substantial	First aid treatment will be required
Minor	Basic First Aid treatment, if required

# Risk Assessment for Machinery/Equipment in Schools

## SUPPORT DOCUMENT

This worksheet is provided as a guide to assist in the Identification, Assessment, Control and Evaluation of hazards associated with machinery/equipment.

<b>School / College Name</b>	
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<b>Machine/Equipment</b>	<b>Machine General Name</b>	<b>Machine Brand name</b>	<b>Model of Machine</b>

<b>LOCATION and IDENTIFICATION of Machine</b>	<b>Location (Room Name)</b>	<b>Serial Number</b>

<b>Intended uses of this Machine</b>	
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<b>Where was this Machine purchased/obtained?</b>		<b>Date of acquisition</b>	/	/

<b>Indicate whether that the machine design conforms to the relevant Australian standard.</b>	<small>AS 1485 Safety &amp; health in workrooms of educational establishments</small>	Yes	No	Unsure - explain:
	<small>AS 4024.1 Safeguarding of machinery Part 1 General principles</small>	Yes	No	Unsure - explain:
	<small>AS 1453 Electrical equipment of industrial machines</small>	Yes	No	Unsure - explain:

<b>Date of this inspection</b>	/ /	<b>Name of person conducting this Risk Assessment</b>		<b>Position of person conducting this Risk Assessment</b>	

The person completing this worksheet should be a competent person as defined in the relevant workplace safety legislation of your state.

General Documentation		YES	NO	Don't Know	Not Applicable	Comment
A.	Is there a need to have inspection, testing and maintenance checklists and records developed & made available for all machines and equipment?					
B.	Is there a need to have Safe Working Procedures developed and communicated for this machine and/or equipment?					
C.	Is there a need to locate a make a manufacturers operation manual available?					
D.	Is there a need to put a procedure in place to communicate the results of this risk assessment to all users of the machine and/or equipment? eg. In a Safe Working Procedure document or training program such as 'OnGuard' STP					

**The following seven questions relate to ELECTRICALLY POWERED fixed machines ONLY**

All electrically powered fixed machines MUST conform to these points Answer each question by placing a tick (✓) in the appropriate response column		YES	NO	Don't Know	Not Applicable	Control Measures Taken Treatment of Risk
I.	Is there a need to have the electrically powered machine and/or equipment connected via an individual isolating switch that is lockable in the OFF position?					
II.	Is there a need to have the machine fitted with a Direct On Line (DOL) push-button type of Stop-Start control?					
III.	Is there a need to have a 'Start' button recessed or flush with the switch body and of any colour other than red (Usually green or black) fitted to the machine and can it be identified by the word START ?					
IV.	Is there a need to have a 'Stop' button red in colour, with a mushroom head or be proud of the switch body fitted to the machine and can it be identified with the word STOP ?					
V.	Is there a need for the machine to have a DOL Stop-Start control with a "no volt relay" incorporated into the circuit?					
VI.	Is there a need to have Stop Controls positioned at each operating position within the easy reach of the operator so that the machine can be stopped in an emergency?					
VII.	Is there a need where the machine is fitted with a machine light, to have these lights re-connected and fitted at extra low voltage? (Max 50V AC or 100V DC)					

**The following questions relate to all MACHINES and their USE**

For each YES response carry out a RISK ASSESSMENT		YES	NO	Don't Know	Not Applicable	Control Measures Taken Treatment of Risk
Answer each question by placing a tick (Ü) in the appropriate response column						
1.	Are there any <u>belt and pulley drive</u> systems that are not totally enclosed by a guard?					
2.	Are there any <u>gear drive or chain drive</u> systems that are not totally enclosed by a guard?					
3.	Does the machine have any guards, covers, doors etc. designed to be removed or opened to gain access to Pulleys, Gears etc, that are <u>not interlocked</u> , (Micro switched), with the energy supply					
4.	Is it possible, when the machine is running, that any guards, covers, doors etc. can be removed or opened <u>without</u> the use of a <u>tool or key</u> ?					
5.	Are there any <u>unguarded active cutters or blades</u> ? (Guarding normally achieved by manually adjustable guards or automatic guards)					
6.	Are there any other <u>exposed</u> and/or <u>unguarded</u> moving or active parts?					
7.	Are there aspects of any <u>Guards</u> on the machine that render them <u>ineffective</u> ?					
8.	Are there any <u>surfaces within the operator's reach</u> , which could cause injury if touched?					
9.	Is there any potential for parts of the body, hair or clothing to become <u>entangled or drawn</u> into the machine?					
10.	Is there any risk of a person becoming <u>trapped</u> and/or <u>crushed</u> by the machine or any moving part/s of the machine?					
11.	Could the operator become <u>trapped and suffocate</u> whilst operating the machine?					
12.	Is there a potential hazard relating to <u>access and egress</u> for this machine?					
13.	Are there any parts of the machine that could cause a <u>cutting or puncture</u> injury?					
14.	Could materials, work pieces, parts of the machine or waste be <u>ejected and hit</u> the operator or other person in the vicinity?					
15.	Could any generated materials or waste <u>cause cuts or other injury</u> if touched?					
16.	Are there any areas within the operator's reach where a <u>shear hazard</u> is created between parts of the machine or between the machine and work piece?					

**The following questions relate to all MACHINES and their USE**

For each YES response carry out a RISK ASSESSMENT		YES	NO	Don't Know	Not Applicable	Control Measures Taken Treatment of Risk
Answer each question by placing a tick (Ü) in the appropriate response column						
17.	Does any machine part move in such a way that it could <u>strike</u> the operator or anyone in the vicinity?					
18.	Is there a hazard from the <u>lack</u> of an <u>emergency stop mechanism</u> ?					
19.	Is there a hazard from the <u>inaccessibility</u> of an <u>emergency stop mechanism</u> ?					
20.	Is there potential for work to <u>move, loosen, shift or grab</u> during the machining operation?					
21.	Does the operator need to over-reach, stretch, lift, carry or bend in such a way that it may cause <u>body strain</u> ?					
22.	Is there a potential hazard from <u>insufficient lighting</u> of the <u>existing lighting</u> ?					
23.	Is there a potential hazard present relating to <u>radiation</u> or <u>excessive light</u> ?					
24.	Is there a potential hazard present relating to <u>gas, vapour or liquid</u> under pressure?					
25.	Is there a potential hazard present relating to <u>vibration</u> ?					
26.	Is there a potential hazard present relating to <u>fire</u> or <u>excessively high temperature</u> ?					
27.	Is there a potential hazard present relating to <u>dust</u> or <u>other atmospheric contaminants</u> ?					
28.	Is there a potential hazard present relating to <u>explosion</u> potential?					
29.	Is there a potential hazard present relating to <u>moisture or dampness</u> ?					
30.	Is there a potential hazard present relating to <u>pressure or vacuum</u> ?					
31.	Is there a potential hazard present relating to <u>electricity</u> ?					
32.	Is there a potential hazard present relating to <u>excessive noise</u> ? (Noise levels not to exceed 85db(A))					

# Worksheet Guidelines

This worksheet is designed with each question requiring the choice of four answers:

- **YES**
- **NO**
- **DON'T KNOW**
- **NOT APPLICABLE**

The "**DON'T KNOW**" response category is provided for two reasons.

First, the person completing the worksheet may not be involved in the day-to-day operations of the area being checked and therefore not aware if certain hazards exist or safety precautions are being followed.

Second, the person completing the worksheet may not know whether a certain condition exists because, for example, a piece of machinery may not have been checked recently or the technical specifications of a particular tool are not known to them.

The "**NOT APPLICABLE**" category is provided for obvious reasons. Certain sections of the worksheet may not apply to the machine in your school. Similarly, individual questions may not apply to your school situation.

## Further Action to Take

Once the worksheet has been completed, you should use the Interpretation Guide for guidance in the interpretation of your responses to the questions presented.

It will also suggest ways you can use the worksheet information to promote greater awareness of health and safety issues at your school, including discussions with fellow staff members and the school executive.

The worksheet questions are extensive and cover the main health and safety issues nominated, but they are by no means all encompassing.

## Interpretation Guide

The following information may help you to interpret your responses to the worksheet questions and identify issues that warrant your attention.

### **YES** Responses:

"**YES**" responses indicate that safety measures are NOT being followed, whereas "**NO**" responses suggest they are. If you have answered "**YES**" to any question in the worksheet, it should be interpreted as a red flag - a potential danger which must be dealt with immediately. Your first action is to cease all tasks in the activity area concerned until adequate safety measures can be implemented. You may wish to discuss appropriate safety measures with fellow staff members who might know more than you do about why the hazard exists and how best to deal with it.

Take the time to assess the degree of danger that is associated with the issue producing the “**YES**” response. While you may be able to reduce the potential effect of a hazard by taking the minimum precaution, it may be in your best interest to take additional, more stringent measures to ensure injury or property damage is avoided.

### **NO Responses:**

**NO** responses to any question, indicate appropriate measures to minimise the risk of hazards is being taken. However, the questions usually describe only the minimum precautions necessary to ensure workplace safety. Even if you have answered a specific question with a “**YES**” response, you should still examine what further measures can be taken to increase safety in the area covered by the question.

### **DON'T KNOW Responses:**

A **DON'T KNOW** response to a question does not necessarily mean a health or safety hazard exists since, as the person conducting this checklist, you may rely on the knowledge and experience of others in performing certain tasks. A “**DON'T KNOW**” response merely alerts you to a potential danger and warrants verification with an appropriate staff member who has responsibility for the task covered by the question. It is suggested that all health and safety questions leading you to answer “**DON'T KNOW**” should be discussed fully and openly with fellow staff members to ensure hazards of which you are not aware do not exist.

### **NOT APPLICABLE Responses:**

Even though most questions to which you may respond “**NOT APPLICABLE**” may indeed not apply to your situation, it is worth checking with your fellow staff members.

## **Overall Assessments**

There is no proper way to tally your “**YES**” and “**NO**” responses in order to arrive at some numerical score of the overall risk level. Not all of the questions (and corresponding responses) in the worksheet carry the same weight in terms of degree of importance.

The level of importance attached to any question or set of questions (and to the corresponding answers) must be determined largely by the person conducting the risk assessment and based on the nature and characteristics of the operation being checked.

In attaching relative importance to each question and answer, factors must be taken into account such as the number of people involved, the frequency of use of equipment, machinery and buildings, the physical lay-out and the type of work tasks performed.

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