HAZARD IDENTIFICATION AND RISK ASSESSMENT

STEP 1: IDENTIFY HAZARDS

WHAT IS A HAZARD? – A **hazard** is something with the potential to cause harm.

HAZARD	RISK
Work Environment	The likelihood that a worker might suffer carbon monoxide poisoning because they are using a petrol driven pump in a well.
Energy – electricity	The likelihood that a worker might be electrocuted because they are exposed to electrical wires whilst using a deep fryer that has inadequate insulation
Manual Handling	The likelihood that a worker might suffer back strain from manually lifting 40kg bags.
Noise	The likelihood that a workers and others in the area might suffer irreparable hearing damage because they work near someone continuously using a jack hammer > 85 d(B) A
Substance	The likelihood that a worker might sustain a needle stick injury and become infected whilst taking a blood sample from a patient with infected blood
Plant	The likelihood that a worker workers hand might be crushed whilst using a printing machine because the unguarded rollers drew in the workers hand

WHAT IS A RISK? - A **risk** is the likelihood that death, injury or illness might result because of the hazard.

STEP 2 – ASSESS THE RISK

Risk Assessment Method

(a) For each of the risks:

- Estimate the **likelihood** of an incident occurring at your workplace.
- Estimate the **consequence** of an incident occurring at the workplace
- Combine your likelihood and consequence estimates to the risks.

Using the ratings of each risk develop a prioritized list of workplace risks requiring action.

Likelihood Rating

1	Extremely likely	Could happen frequently
2	Likely	Could happen occasionally
3	Unlikely	Could happen but rarely
4	Very unlikely	Could happen, but probably never will

Consequences

Extreme	Death or permanent disablement
Major	Serious bodily injury or serious work caused illness
Moderate	Moderate injury illness requiring casualty treatment
Minor	Minor injury or illness requiring first aid only, no lost work time

Risk Ranking Method

For each identified hazard, the appropriate likelihood and consequence rating is selected. These are a guide only and different situations or operating environments may alter the predicted outcome.

Risk Priority Chart

LIKELIHOOD How likely it could occur?	**CONSEQUENCES:** How severely it could affect health and safety			
	EXTREME –death - or disablement	**MAJOR** - Serious bodily injury or serious work caused illness	**MODERATE** - Injury or illness requiring casualty treatment	**MINOR** - Injury or illness requiring first aid only, no lost time
VERY LIKELY – could happen frequently	1	2	3	4
LIKELY – could happen occasionally	2	3	4	5
UNLIKELY – could happen, but rare	3	4	5	6
VERY UNLIKELY Could happen, probably never will	4	5	6	7

This stage of the Risk Assessment gives a basis for ranking risks in terms of their priorities.

It is important to note that the risk scores obtained have no absolute value. This chart provides a means for ranking the risks only.

The scores 1-7 in the risk priority chart indicate how important it is to do something about each risk, as follows:

Score	**Action**
1, 2 or 3	Do something about these risks immediately
4 or 5	Do something about these risks as soon as possible
6 or 7	These risks may not need immediate attention

PRIORITISE RISKS

Prioritise risks based on their score

Remember, the risk scores are useful for comparison purposes ONLY. When the risk scores for all risks in the workplace are compared, the resulting ranking will be a guide to the order in which the risks should be addressed.

Step 3 DECIDE ON CONTROL MEASURES

CONTROL PRIORITIES
Firstly, try to **eliminate the hazard** If this is not possible, **prevent or minimize exposure to the risk** by one a combination of: • *Substituting* a less hazardous material, process or equipment • *Redesigning* equipment or processes • *Isolating* the hazard Note: These measurers may include engineering methods As a last resort, **when exposure to the risk is not (or can not be) minimized by other means:** • Introduce *administrative controls* • Use appropriate *personal protective equipment*

1.0 Description

1.1 Rotary Suction Sander – Sandivac SV25 and SV30

2.0 Construction

The Polivac Rotary Suction Sander - Sandivac SV25 and SV30 are powered by a heavy duty 4 pole electric motor that offers the performance and strength required to satisfy the rigorous demands of floor sanding applications.

A patented off set motor position ensures that starting torque is counter balanced and therefore provides the operator with an easy to use, well balanced machine that can be used fir prolonged periods without operator fatigue.

Upon turning off the vacuum motor the Sandivac can be used for scrubbing and stripping applications.

Manufactured from high quality components the Sandivac is robust and hardwearing and perfectly suited to the contractor market.

3.0 Potential Hazards

3.1 Electric shock
(1) Damage to the electric cord
3.2 Injury due to burns, fire or explosion when operating machinery
3.3 Property damage due to colliding with fixtures or damage to machinery
3.4 Injury due to trips, slips and falls
3.5 Respiratory damage/illness due to inhalation of dust hazards
3.6 Joint and bone disorder due to machine vibration
3.7 Muscular skeletal damage due to incorrect operation of machine

4.0 Risk Priority Chart

Hazard	Likelihood	Consequence	Control Priorities
Electric Shock	3	4	Ensure cord is in serviceable condition at start/finish of every shift and lead is fitted with a current test and tag
Burns, Fire or Explosion	4	6	Machine must not be operated in an area where flammable goods are stored. Dust bag to machine must be emptied each night before leaving the premises
Property Damage	4	6	Ensure machine is always operated by fully trained & competent persons
Slips, Trips or Falls	3	5	Correct footwear must be worn. Observe caution when operating machine on wet surfaces EG. stripping
Respiratory damage	3	6	Machine must not be operated in a confined area without adequate ventilation. Appropriate PPE must always be worn when sanding
Vibration	3	5	Don’t operate machine for lengthy periods. Ensure machine is correctly adjusted to prevent sideways drag
Muscular Skeletal	3	5	When turning – do not twist. Ensure operator is fully trained

Hazards and controls

5.0 Safe use

The machine operations manual should be read and fully understood prior to machine operation. This machine is not designed for use by young children.

5.1 Hazard 3.1 Electric shock

5.1.1 Hazard 3.1 (1) Damage to the electric cord

5.1.1.1 Do not pull on an entangled while using the machine, this can

- Sever the insulation exposing live wires
- Break the conductors in the cord causing the unit to become inoperative
- Stretch the cord causing it to kink and knuckle, and create hot portions along its length

5.1.1.2 Stretching of the cord can also be caused by**,**

- Winding the cord from the machine end while still plugged into the power point
- Winding the cord from the plug end
- Looping the cord too tightly

5.1.1.3 Check cord for cuts, fractures and clean cords if soiled after use

5.1.1.4 Replace knuckled, cut or damaged cords

5.1.1.5 When sanding tasks are completed, switch the Sandivac OFF at the machine, then switch OFF at the power point and unplug from the power point. Gather the cord from the machine end and loop over the cord storage points on the frame for storage.

5.1.2 Hazard 3.1 (2) Wetting, spraying, washing machine with water and with power connected

5.1.2.1 Do not store the machine outdoors or expose to rain

5.1.2.2 Do not handle plug or machine with wet hands and power connected

5.1.2.3 Do not wash or hose down the machine – however ensure machine is thoroughly cleaned on a regular basis (dust and or stripping solution)

5.1.2.4 Do not clean the machine by spraying it with water, detergent, or cleaning solutions

5.2 Hazard 3.2 Injury due to burns, fire or explosion when operating machinery

5.2.1 Do not use this machine in areas where flammable or combustible liquids, vapors or gases are present. The motor used in this machine can cause explosions when used in areas containing these.

5.2.2 Ensure that all body parts are kept away from the machines motor during operation and for at least 30 minutes after operation.

5.2.3 Ensure that dust collection bag is emptied regularly during operation to reduce risk of fire

5.3 Hazard 3.3 Property damage due to colliding with fixtures or damage to machinery

5.3.1 Ensure that machine is operated according to operating instructions

5.3.2 Ensure that area in which machine is to be operated is clearly identified with correct signage and clear of obstacles

5.3.3 Ensure that the area that the machine is to be used in is greater than 500mm wide

5.4 Hazard 3.4 Injury due to trips, slips and falls

5.4.1 Operators should not wear open top shoes when using this equipment

5.4.2 Plan the work path based on obstacles within the work area

5.5 Hazard 3.5 Respiratory damage/illness due to inhalation of dust hazards

5.5.1 Machine not to be operated in an enclosed environment for lengthy periods without correct respiratory gear

5.5.2 Ensure that floor surface is thoroughly cleaned to remove dust and dirt prior to operating machine as a stripping machine

5.5.3 Ensure that machine is correctly serviced as per operating instructions

5.6 Hazard 3.6 Joint and bone disorder due to machine vibration

5.6.1 Ensure that machine is correctly adjusted and serviced as per operating instructions

5.6.2 When operating correctly the machine should pose no risk of vibration expose to the operator

5.7 Hazard 3.8 Muscular skeletal damage due to incorrect operation of machine

5.7.1 Operate machine as per operating instructions

5.7.2 When turning do not twist at the waist, turn using your feet

5.7.3 Ensure that handle assembly is correctly fitted to the operator

5.7.4 Never run whilst operating the machine. Machine only to be operated at walking pace

5.7.5 Exercise great care when operating machine on raised platforms or close to stairs

6.0 CONCLUSION

Polivac International Rotary Suction Sander – Sandivac SV25 and SV30 are manufactured to the highest possible standards and meet the requirements of Australian Standards.

Polivac International is a quality endorsed company, committed to meeting the requirements ISO 9001:2000 – Quality Management Systems, and providing customer assurance that manufactured product, will continue to meet Australian Standards.

Polivac International is committed to adhering to all Occupational Health and Safety Codes of Practice and Legislation, and is proud of its commitment to providing a safe work environment for its employees and machine operators.