

Polivac International Occupational Health and Safety Management Protocol

## 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

| <b>LIKELIHOOD</b><br>How likely it could occur?           | <b>CONSEQUENCES:</b> How severely it could affect health and safety |                                                                        |                                                                     |                                                                            |
|-----------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------|
|                                                           | <b>EXTREME</b><br>–death - or disablement                           | <b>MAJOR -</b><br>Serious bodily injury or serious work caused illness | <b>MODERATE -</b><br>Injury or illness requiring casualty treatment | <b>MINOR -</b><br>Injury or illness requiring first aid only, no lost time |
| <b>VERY LIKELY</b> – could happen frequently              | 1                                                                   | 2                                                                      | 3                                                                   | 4                                                                          |
| <b>LIKELY</b> – could happen occasionally                 | 2                                                                   | 3                                                                      | 4                                                                   | 5                                                                          |
| <b>UNLIKELY</b> – could happen, but rare                  | 3                                                                   | 4                                                                      | 5                                                                   | 6                                                                          |
| <b>VERY UNLIKELY</b><br>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                                             |
|------------------|----------------------------------------------------|
| <b>1, 2 or 3</b> | Do something about these risks immediately         |
| <b>4 or 5</b>    | Do something about these risks as soon as possible |
| <b>6 or 7</b>    | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Firstly, try to <b>eliminate the hazard</b></p> <p>If this is not possible, <b>prevent or minimize exposure to the risk</b> by one a combination of:</p> <ul style="list-style-type: none"><li>• <i>Substituting</i> a less hazardous material, process or equipment</li><li>• <i>Redesigning</i> equipment or processes</li><li>• <i>Isolating</i> the hazard</li></ul> <p>Note: These measurers may include engineering methods</p> <p>As a last resort, <b>when exposure to the risk is not (or can not be) minimized by other means:</b></p> <ul style="list-style-type: none"><li>• Introduce <i>administrative controls</i></li><li>• Use appropriate <i>personal protective equipment</i></li></ul> |

## 1.0 Description

### 1.1 SL2000 Stingray ultra-high-speed electric straight line burnisher

## 2.0 Construction

The Stingray SL2000 ultra-high-speed electric straight-line suction burnisher is the optimum in achieving the glossy enduring 'wet look' shine and luster. At 1500 rpm and combined with the in-built dust control vacuum system, the Stingray goes about its work, burnishing and micro scratch repairing, efficiently and quietly.

Easy and comfortable operation is facilitated by being well balanced, highly maneuverable and fitted with a ratchet lever adjustable handle which comprises ergonomic hand grips and positive actioning triggers with safety buttons.

Maximum floor adhesion is achieved using the Rubbermaid pad holder system. It is designed to follow the contours of the floor surface, whilst maintaining a consistent 50cm burnishing path.

A full floating skirt entraps the polishing dust allowing the vacuum system to leave the floor dust free. The sturdy metal base is powder coated with a full wrap around bumper for protection and durability.

## 3.0 Potential Hazards

- 3.1 Electric shock
  - (1) Damage to the electric cord
  - (2) Wetting, spraying, washing machine with water and with power connected
- 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 Hearing impairment due to excessive machine noise
- 3.8 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                                                                |
| Property Damage          | 4          | 6           | Ensure machine is always operated by fully trained & competent persons                                                                  |
| Slips, Trips/Falls       | 3          | 5           | Correct footwear must be worn                                                                                                           |
| Vibration                | 3          | 5           | Do not operate machine for extended periods without a rest period                                                                       |
| Muscular Skeletal        | 3          | 5           | When turning – do not twist. Ensure machine handle is correctly adjusted to suit individual operators. Ensure operator is fully trained |

## **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 burnishing tasks are completed, switch the burnisher 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**

##### **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 body parts are kept away from the buffing pad during operation as friction burns can be caused**

### **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 bias control has been correctly aligned by a qualified technician for straight tracking**

#### **5.3.4 Ensure that the area that the machine is to be used in is greater than 600mm 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**

#### **5.4.3 Never operate burnisher when the surface to be buffed is wet**

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

**5.5.1** Ensure that floor surface is thoroughly cleaned to remove dust and dirt prior to operating machine

**5.5.2** Respiratory protection may be required when emptying dust bag

**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 tuned 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 Stingray SL2000 ultra high-speed electric straight line burnisher is 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.