Introduction

Hot melt glue guns are designed to supply a melted adhesive that can provide a quick, reliable and strong method of joining materials. The adhesive dries or sets rapidly allowing the materials to be joined in a short space of time without using nails or clamps. Glue guns are powered by electricity and consist of an insulated plastic body, a trigger mechanism and a nozzle to direct the melted glue.

Glue is in a solid stick form and is inserted into the rear of the gun.

Identified Risks and Hazards

General hazards that may arise when using an electric heating appliance include:

- burns from hot metal or components
- inhalation of noxious fumes
- overheating can damage work

General hazards that may arise when using a hot glue gun include:

- burns from the hot glue or metal component of the gun
- inhalation of fumes
- electrical – the metal nozzle when hot, melts plastic coated electrical cords

Pre-operational Safety

Before using the hot glue gun, examine the power cord, extension lead, plugs, sockets and power outlet for damage. Look for:

- cracked or damaged casing
- bare wires or loose connections
- damage to cord sheathing
- loose or missing screws

Ensure that there are no flammable gases, liquids or other materials in the work vicinity.

Make sure the bench area is not contaminated with oil or grease.

Where a ventilation system is available, make sure it is operating properly.
Do not use gluing equipment in confined spaces, or where the ventilation is considered not to be adequate.

Operating Safety Precautions

Make sure the glue gun has been tested and tagged before you use it.

The hot glue gun should not be used near water.

The melted glue must not be touched, as it will be sticky and will burn the skin.

Cotton gloves should be worn to avoid accidental burns from the melted glue.

Avoid touching metal parts of the gun as these parts are hot and will cause burns.

Vapours given off during normal operation are not considered toxic, but if overheated, chemical breakdown of the components may occur releasing a complex mixture of organic materials.

Ensure hot melt guns are run at the recommended operating temperatures and used in a well-ventilated area.

Do not force glue sticks into the rear of the glue gun.

Do not push any object other than a glue stick into the back of the glue gun.

When the glue gun is not in use, place it on its stand.

Always place the stand on a piece of cardboard or timber to catch any drips of glue from the gun.

When not in use the glue gun should be switched off and placed in a safe position.

Do not wind the cord around body of the glue gun while it is still hot.

Daily Maintenance

Always wipe any excess molten glue from around the nozzle at the end of each work session. This will avoid build up of glue deposits which can char. This should be done while the applicator is still hot and always wear protective gloves.

On completion of the gluing procedure, make sure the gun has
cooled down before returning it to its storage position. Store the glue gun so as to prevent damage to the electrical cord. Never use defective equipment. Report it to your supervisor.

**Isolating and Lockout Switches**

Electrically operated machines should be fitted with a flush green on or start switch and a red stop switch that has a raised mushroom shaped head for fast emergency contact.

As well as start and stop switches, all machines must have an isolating switch, which enables the main power supply to be switched off when the machine is being set up, adjusted or when maintenance is being carried out.

**Operating Procedures**

Load the glue gun with the correct glue stick through the rear of the gun.

Squeeze the trigger several times to position the glue stick.

Most glue guns do not have their own switch. Some do have an indicator light to show that the power is switched on.

Wait about five minutes for the gun to heat sufficiently. Trying to force the glue through by pressing excessively on the trigger can damage the gun.

Have all materials to be joined prepared and ready.

Apply the melted adhesive to one surface only and bring the surfaces together within a few seconds.

Hold or clamp the surfaces together until the adhesive has cooled and set.

Reload another glue stick once there is sufficient space in the rear of the gun to support another stick.

Do not extract glue sticks from the rear of the gun as this can damage the feed mechanism.

Always obtain permission from the teacher before using the soldering equipment.

Check the following clothing for safety hazards and take appropriate action:

- Fasten any loose clothing and tie apron cords or straps at the back
- Remove any jacket or coat and any school uniform tie
- Roll up shirt sleeves above the elbows or fasten them securely at the wrists
- Do not wear finger rings, watches, bracelets or necklaces
- Wear solid firm shoes which provide adequate protection for the feet
- Wear appropriate Personal Protective Equipment such as safety glasses for eye protection.

Wear appropriate PPE such as cotton gloves to protect your hands.

Ensure you have had instruction and training in the use of the hot glue gun.

Always work with GOOD VENTILATION and AVOID INHALING FUMES.