Introduction

The industrial sewing machine is ideal for sewing garments, upholstery and crafts. These machines differ from a domestic sewing machine in that it offers limited stitches, i.e. straight stitch or zig zag or can have twin needles for two rows of stitching.

Also they have a much higher speed and more technical machine than the domestic sewing machine. Every stitch is perfectly balanced and evenly placed right where you want it.

The machine has a limited range of presser feet, stitch length, and needle position is predetermined. There’s also a bobbin winder you can’t overfill, and scissors are required to cut threads.

Identified Risks and Hazards

Hazards that may be encountered when conducting sewing activities include:

- cuts and injuries from sharp edges, knife blades, scissors and pins
- burns electrocution
- finger injuries while sewing
- eye injury from broken needles
- back injury from poor posture
- eye strain from poor lighting
- back injury from improper lifting procedures

Pre-operational Safety

The following safety checks and precautions should be carried out when preparing to set up and use the sewing machine in the textiles area:

- Ensure you have had instruction and training in the use the sewing machine.
- The sewing machine should be turned off and isolated from the
main electricity supply when not in use.

- The operator should seek permission from the supervisor before using the sewing machine.
- Always check that the sewing machine and its cord are in good working order.
- Check all adjustments and settings carefully before commencing any sewing operation.
- The work area should be clean and free of equipment, rubbish and other obstacles.

Operating Safety Precautions

Make sure all other students keep away from the immediate work area at all times.

Not wear loose clothing, especially long sleeves and neck ties.

One person only is to operate a sewing machine at any time.

Do not touch a sewing machine whilst another person is operating it.

Turn the power off when making adjustments to the sewing machine. eg. changing the presser foot and the needle.

Never race the sewing machine at high speed.

Take care not to machine over pins.

Make sure the take-up lever is in the upper most position before pulling out the fabric and cutting threads.

Daily Maintenance

Oiling
Keep the industrial sewing machine well oiled. The oil bed needs to check monthly to ensure oil is not below the low level marker within the oil bed. Be sure not to over oil. Check the oil bed on a regular for threads, dust and pins. Oil will need to be a light urine colour. Sew a few stitches on a small swatch of fabric to absorb any oil excess before beginning your project.

Cleaning
It is important to keep the machine as free of lint as possible.

Shining
Wipe the surface of the machine with a clean, soft, damp cloth. Do not use abrasives on your machine and do not place pieces of tape on it. Seam guides can be purchased from your dealer. Clean the LCD screen with a soft, damp cloth and never use alcohol or solvents on the machine.

Storage
Avoid exposing the sewing machine to extreme temperatures. Do not store it in a room that is cold, hot, or humid. Cover the machine when not in to keep dust and lint to a minimum.

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 and Precautions

**Electrical Currents**
Do not use the machine during a thunderstorm and unplug your machine when not in use at any time.

**Fabric Flow**
Do not push or pull fabric while sewing. Let the machine do the work—your hands should guide the fabric without forcing it.

**Needle and Thread**
Your supervisor will replace the needle as necessary. If the needle is broken, report it.

**Pins**
Do not sew over pins. Not only will this blunt or dull the needle, it can also cause timing problems if the needle strikes a pin hard enough to affect the alignment of the needle bar.