

### Safety Sheet 9 – Saws

Consult the *Ontario Occupational Health and Safety Act* and *Regulation 851*, as well as the relevant *CSA Standard* for detailed information on different types of saws.

A **band saw** is generally used in woodworking; it consists essentially of a toothed metal band (approximately 4 metres long) coupled to, and continuously driven around the circumferences of two wheels

A **table saw** is a circular saw mounted under a table or bench so that the blade of the saw projects up through a slot; this then allows the object to be cut by sliding it along the table

A **competent person** is defined by the Ontario Occupational Health & Safety Act as a person who (i) is qualified because of knowledge, training and experience to organize the work and its performance; (ii) is familiar with this Act and the regulations that apply to the work and (iii) has knowledge of any potential or actual danger to health & safety in the workplace.

#### Type of Hazards Associated with saws:

- Mechanical – potential injuries include cuts, contusions and abrasions caused by improper guarding of parts and contact with the saw blade itself.
- Ergonomic – muscular skeletal disorders and basic back pain caused by positioning of the operator while using the equipment.
- Physical – hearing loss due to the noise level of the machine and the duration for which the person is exposed.
- Chemical – dermatitis and irritation of the respiratory tract; consult the MSDS to determine potential hazards of cutting fluid(s).

#### Prior to stating the saw:

- Read and understand the owner's manual – understand the limitations associated with the particular equipment – make manuals and information available to employees.
- Ensure that guards, brake and any other engineering control are in place, in good working condition and correctly adjusted. Conduct a pre-start check and document your findings (include your name, the date the inspection was conducted, the condition of the equipment, the signature of the person along with any other pertinent information).
- Ensure that your work area is kept clean of debris, slip, trip and fall hazards.
- Check the saw blade for cracks, orientation, tooth condition and the sharpness of the blade – the blade should be free of defects to avoid potential breakage; in addition, keeping the blade sharp can increase the efficiency of the saw.
- Ensure that all stationary equipment is anchored securely to the floor or workbench to reduce vibration.
- Ensure all machines have a(n) start/stop/emergency stop button located within easy reach of the operator.

- Use saw blades that are appropriate for the job being undertaken (correct pitch, tooth size, blade width etc.).

**Safety Considerations:**

- Ensure that when operating a saw that the appropriate type of personal protective equipment is used; for example, protective eyewear with side shields.
- When necessary, remove excess shavings, chips, or other debris from your work area with a wire brush or vacuum; never use your hand.
- Ensure that the blade of the saw is running smoothly against the upper and lower guide wheels.
- Keep the saw properly oiled and maintained – ensure to include maintenance in your inspection log.
- Use a push stick to avoid having your hand close to the saw blade.
- Provide adequate lighting at the cutting surface of the saw – an adjustable light can help with illumination.
- Be cognizant of kickback.
- Ensure that electrical devices are properly grounded.

**When operating a band or table saw, DO NOT:**

- Do not use your hand to brush away debris.
- Do not leave the saw running unattended.
- Do not use excessive force when cutting an object.
- Do not wear loose clothing or jewelry.
- Do not adjust the saw blade or pitch while the saw is running.
- Do not use the equipment for anything other than its intended use.
- Do not stop a blade by thrusting stock against the cutting edge, or the side of the blade immediately after the power has been turned off.