

Equipment identification: \_\_\_\_\_

Date : \_\_\_\_\_

# Bandsaw

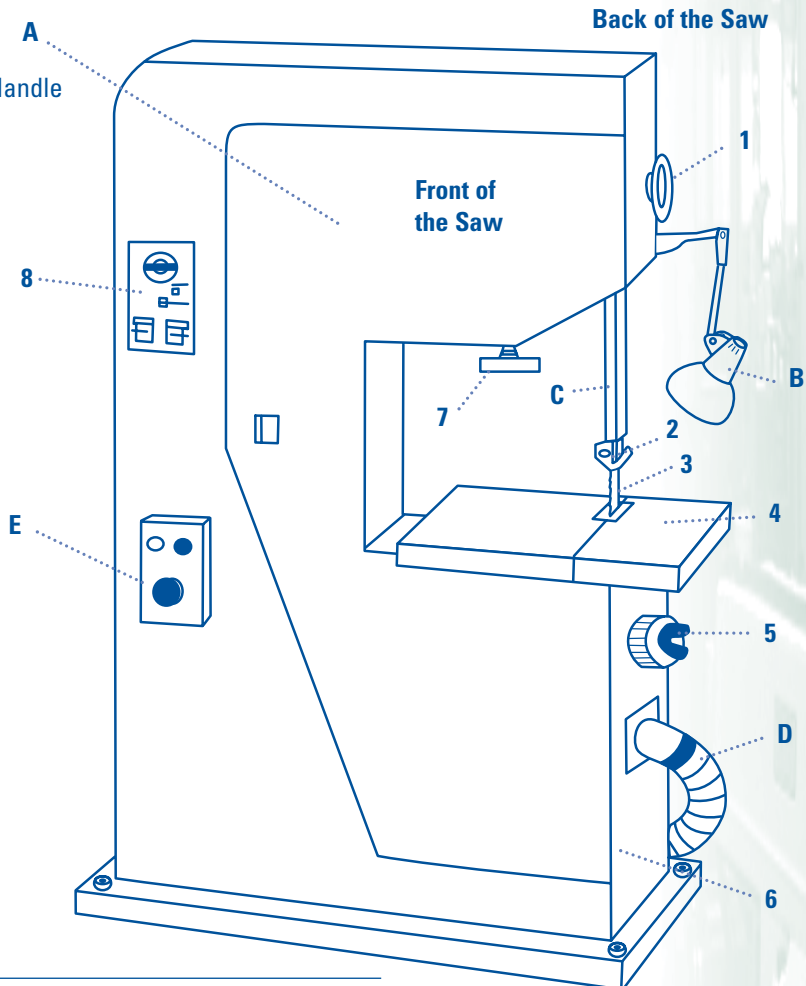
## Bandsaw Workstation

### Bandsaw Parts

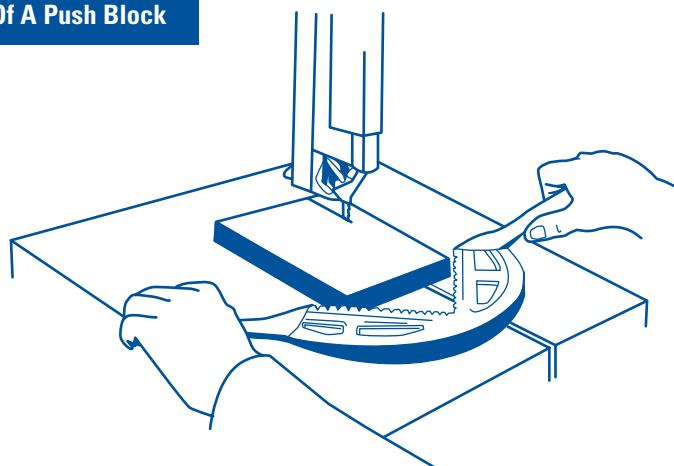
- 1 Guard and Guide Height Adjustment Handle
- 2 Upper Guide
- 3 Bandsaw Blade
- 4 Table
- 5 Blade Speed Adjustment Mechanism
- 6 Frame
- 7 Blade Tension Adjustment Handle
- 8 Blade Splicer

### Safety Devices

- A Door With Lock Barring Access To Wheels And Ascending Blade
- B Task Lighting
- C Guards For the Descending Blade
- D Dust Collection Conduit
- E Emergency Stop Button



## Example Of A Push Block



Association paritaire pour la santé  
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Secteur fabrication de produits  
en métal et de produits électriques  
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# SELF-ASSESSMENT FORM

For Occupational Health And Safety

**LEGEND**

**Preventative Measures**

- ▶ Procedural Measures
- Orders/instructions

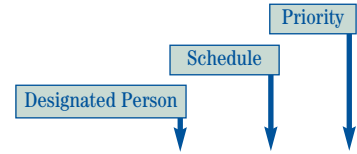
**Priority Codes for applying risk measures:**

- A. Immediate stoppage and resolution
- B. Resolution as soon as possible
- C. Resolution according to normal company procedures

The suggested preventative measures are based in part from the Workplace Health And Safety Regulations (RSST, S-2.1, r.19.01), from An Act Respecting Occupational Health and Safety (Québec LSST, S-2.1), as well as INRS Safety Data Sheet ND 2151, *Bandsaws*.

# Mechanical Hazards

**Most likely injuries: Cuts, foreign bodies, contusions, fractures.**



| Preventative measures  | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior. |
|--|--|---|-------|--------|--------|--------|
| <b>Risk Factor: Accidental Contact With The Moving Blade</b>   |  |   |       |        |        |        |
| ▶ Install fixed guards behind and on the side of the machine.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install a moveable guard on the ascending blade and in front of the machine (side where the blade changes are done).   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install a guard on the descending blade, which is:<br>- adjustable to the height of the piece being cut<br>- tightly fastened to the upper blade guide<br>- easily maneuverable. | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install a brake (mechanical, hydraulic) to quickly stop the rotation of the saw.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Adjust the upper guide and guard assembly as close as possible to the workpiece (1 to 4 millimetres).  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Use a push block to guide smaller pieces.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Use a push stick to finish the cut.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Remove saw chips with a brush, not with your hands.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Never allow a bandsaw to run unattended.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Lower the upper guide and guard assembly onto the table once the work is completed.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Do not wear loose-fitting clothes.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install an easily accessible and clearly marked emergency stop button.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| <b>Risk Factor: Accidental Contact With Moving Parts (Wheels, Belts)</b>   |  |   |       |        |        |        |
| ▶ Install guards.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |

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# Mechanical Hazards (continued)

Most likely injuries: Cuts, foreign bodies, contusions, fractures.

| Preventative measures   | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior.. |
|---|--|---|-------|--------|--------|---------|
| <b>Risk Factor: Accidental Start-Up Of The Bandsaw During Blade Change, Maintenance Or Repairs</b>                              |  |   |       |        |        |         |
| ▶ Install moveable guards in front of the machine (on the side where blade changes are done), with an interlocking device that: | <input type="checkbox"/>                       |   |       |        |        |         |
| - neutralizes the start-up switch when the guard is open, AND   |  |   |       |        |        |         |
| - maintains the guard in the closed position while the band saw is being used, AND  |  |   |       |        |        |         |
| - does not provoke start-up at guard closure.   |  |   |       |        |        |         |
| ● Apply lockout procedures:   | <input type="checkbox"/>                       |   |       |        |        |         |
| - disconnect all sources of energy  |  |   |       |        |        |         |
| - lockout all sources of energy   |  |   |       |        |        |         |
| - validate to ensure start-up is no longer possible.  |  |   |       |        |        |         |
| ● Unplug the electrical supply cord and lockout the plug.   | <input type="checkbox"/>                       |   |       |        |        |         |
| <b>Risk Factor: Contact With The Sharp Edges Of Bandsaw Blade While Not In Use</b>  |  |   |       |        |        |         |
| ● Handle the blade and other parts with cut-resistant gloves. Do not wear gloves while cutting.                                 | <input type="checkbox"/>                       |   |       |        |        |         |
| <b>Risk Factor: Flying Fragments Following Blade Breakage</b>   |  |   |       |        |        |         |
| ● Refer to blade application table to select the proper pitch and blade speed.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Adjust blade tension according to blade width, using the tension indicator scale.   | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Check the blade's state of repair (presence of cracks, quality of the weld, etc.)   | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Check blade/tooth orientation.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Adjust the upper guide and guard assembly as close as possible to the workpiece (1 to 4 millimetres).                         | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Ease off on the feed pressure at the start and end of cut.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Always do a dry run after replacing a blade.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Stop the bandsaw if an unusual noise is detected.   | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Clean the guide brushes to maintain a clean blade.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Regularly check the wheel outer bearing faces.  | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Keep the blade lubricated (wax, cutting fluid).   | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Wear CSA-approved safety glasses with lateral protection.   | <input type="checkbox"/>                       |   |       |        |        |         |
| <b>Risk Factor: Kickback Of A Long Workpiece</b>  |  |   |       |        |        |         |
| ● Supply support for long workpieces.   | <input type="checkbox"/>                       |   |       |        |        |         |
| <b>Risk Factor: Fall, Slipping</b>  |  |   |       |        |        |         |
| ▶ Repair and clean floor: uneven surfaces, holes, slippery floor, presence of saw chips, etc.                                   | <input type="checkbox"/>                       |   |       |        |        |         |
| ● Replace cutting fluid with purpose-designed wax.  | <input type="checkbox"/>                       |   |       |        |        |         |



# Ergonomic Hazards

Most likely injuries: Musculo-skeletal disorders, backaches.

| Preventative measures  | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior.. |
|--|--|---|-------|--------|--------|---------|
| <b>Risk Factor: Handling Heavy And Bulky Workpieces</b>  |  |   |       |        |        |         |
| ▶ Supply mechanical handling devices (hoist, dolly with lift table, etc.) suitable to the weight and dimensions of the workpieces. | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| ● Ask for help from another worker when help is needed.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| <b>Risk Factor: Straining Working Positions</b>  |  |   |       |        |        |         |
| ▶ Install sufficient lighting to illuminate the work area so as to eliminate the need to bend neck and back.                       | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| ▶ Provide adjustable tables which allow for easier access to pieces.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| <b>Risk Factor: Static Standing Work</b>   |  |   |       |        |        |         |
| ▶ Supply an anti fatigue mat.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |

# Physical Hazards

Most likely injury: Hearing loss.

| Preventative measures   | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior. |
|---|--|---|-------|--------|--------|--------|
| <b>Risk Factor: Noisy Workplace Environment</b>   |  |   |       |        |        |        |
| ▶ Install acoustic batting (sound-deadening, viscoelastic) on the inside of the chassis guards and housing. | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Wear earplugs or earmuffs.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |

# Electrical Hazards

Most likely injuries: Electrocutation.

| Preventative measures  | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior.. |
|--|--|---|-------|--------|--------|---------|
| <b>Risk Factor: Contact With Parts Normally Or Accidentally Energized</b>  |  |   |       |        |        |         |
| ▶ Install an isolating switch near the bandsaw, with clear markings.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| ● Lockout the isolating switch box or unplug the electrical supply cord and lockout the plug when performing maintenance or repairs. | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |
| ● Check the supply cord insulation and the bandsaw grounding circuit.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |         |

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# Chemical Hazards

**Most likely injuries: Irritation of the respiratory tract, dermatitis.**

| Preventative measures   | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior. |
|---|--|---|-------|--------|--------|--------|
| <b>Risk Factor: Exposure To Dust</b>  |  |   |       |        |        |        |
| ● Check that there are no hazardous substances in the workpiece to be cut (e.g., beryllium, cobalt, manganese, lead, etc.). | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install a vacuum recovery system to capture dust before it reaches the breathing area.                                    | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Vent the workplace with air changes according to rules and regulations.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ● Wear a NIOSH-approved respirator approved for airborne dust particles generated.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| <b>Risk Factor: Exposure To Cutting Fluids</b>  |  |   |       |        |        |        |
| ● Consult the MSDS documentation.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Purchase cutting fluids that have little or no deleterious effect to skin.  | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Replace cutting fluids with a special purpose-designed wax.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |

# Heat-Related Hazards

**Most likely injuries: Burns.**

| Preventative measures   | Applicable <input checked="" type="checkbox"/> | Not applicable <input type="checkbox"/> | Notes | Desig. | Sched. | Prior. |
|---|--|---|-------|--------|--------|--------|
| <b>Risk Factor: Fire Or Explosion Following Spontaneous Combustion Of Dust</b>  |  |   |       |        |        |        |
| ▶ Install a dust recovery system outside the building if possible. Consult the NFPA 65 Standards if aluminium dust particles are present. | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |
| ▶ Install an explosion vent in the dust recovery system, according to applicable regulations.   | <input type="checkbox"/>                       | <input type="checkbox"/>                |       |        |        |        |

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Completed By:

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This Self-Diagnosis form was developed following a research project in workplace health and safety from IRSST, a workplace health and safety research institute named (Institut de recherche Robert-Sauvé en santé et en sécurité du travail).