

Vertical bandsaw — safe operating procedure

A template for sites that need a documented SOP for vertical bandsaw operation. Complete the shaded fields, delete what does not apply to your machine, and have it reviewed and signed before it is issued.

This template covers vertical bandsaws. Horizontal and metal-cutting horizontal saws are guarded and operated differently and need their own procedure.

1. SITE DETAILS

Site / department	
Machine make and model	
Machine / asset number	
Materials this SOP covers	
Authorized operators	
Prepared by / date	
Next review date	

2. PURPOSE AND SCOPE

Purpose. To set out the minimum safe method for operating, stopping and clearing the vertical bandsaw named above, and to record who is authorized to use it.

Scope. This procedure applies to all employees, contractors and agency staff who operate, clean or service this machine. It does not cover blade manufacture, machine installation, or electrical work, which are separate procedures.

3. RESPONSIBILITIES

Operator

- Operate the machine only after training and written authorization for this machine and material.
- Complete the pre-operational checks before the first cut of each shift.
- Follow this procedure, and stop the machine and report anything that does not match it.
- Wear the PPE listed in section 4 and keep the work area clear.

Supervisor

- Ensure only trained, authorized operators use the machine, and keep the authorization list current.
- Verify that pre-start checks are being completed and that guards are in place and correctly set.
- Arrange isolation, repair and return-to-service for any fault reported.
- Investigate and record incidents and near-misses, and review this procedure after any of them.

4. PERSONAL PROTECTIVE EQUIPMENT

- Eye protection and hearing protection at all times while the machine is running.
- Cut-resistant gloves and apron where your site's risk assessment requires them. Gloves must fit snugly — a loose cuff near a running blade is an entanglement hazard.
- Enclosed, slip-resistant footwear.
- No loose clothing, jewellery, watches, lanyards or drawstrings. Long hair tied back and contained.

5. PRE-OPERATIONAL CHECKS (MACHINE OFF)

1. Confirm you are trained and authorized to operate this machine for this material.
2. Work area clear of obstructions; floor clean, dry and free of offcuts; lighting adequate.
3. Wheel enclosures closed and secure; blade guard fitted and undamaged.

4. Upper blade guide and guard adjust freely, and lock at the set height.
5. Blade condition: no cracks, no missing teeth, correct tension and tracking.
6. Blade is correct for the material and thickness — at least three teeth in the cut at all times.
7. Emergency stop is functional and within reach from the operating position.
8. Push stick, feed jig or fixture available at the machine for small or awkward work.
9. Extraction, coolant or wash-down services connected and working, if fitted.



If any check fails, do not run the machine. Tag it out and tell your supervisor.

6. OPERATING PROCEDURE

1. Set the upper guide and guard so that only the working portion of the blade is exposed above the workpiece.
2. Stand square to the machine at the operating position, out of the line of cut.
3. Start the machine and let the blade reach full speed before the workpiece contacts it.
4. Support the workpiece flat on the table. Use a jig or fixture for round, irregular or unstable pieces.
5. Feed with steady, moderate pressure and let the blade do the work. Do not force the cut.
6. Keep both hands out of the line of cut, offset to either side of the cutting line.
7. Use a push stick or push block once your fingers would come within a hand's width of the blade.
8. Do not reach over, behind or past the blade at any time.
9. Stop the blade before backing out of a cut, clearing offcuts, or measuring the work.
10. Never leave the machine running unattended. Stop it before you step away.

7. SHUTDOWN AND HOUSEKEEPING

1. Complete the cut, then switch off and wait for the blade to come to a complete stop. A coasting blade still cuts.
2. Release blade tension if your machine manufacturer requires it between shifts.
3. Clear offcuts and waste from the table and floor using a tool, not bare hands.
4. Clean down as required for your material and, in food environments, to your sanitation schedule.
5. Leave guards in place and the area clear for the next operator.

8. JAMS, BLADE CHANGES AND CLEANING

1. Switch off and wait for the blade to stop completely.
2. Isolate the machine and apply lockout/tagout. The key stays with the person doing the work.
3. Clear the jam or change the blade using the correct tools. Never apply bare force.
4. Refit and check the guard, blade tension and tracking before restoring power.
5. Remove the lock and tag, then test-run before returning the machine to production.

If jams are frequent enough that this sequence feels like a productivity cost, treat it as a blade-selection or feed-rate problem to fix — not a step to skip.

9. HAZARDS

- **Blade contact at the point of operation** — laceration or amputation. The dominant cause is a hand slipping during a normal feed.
- **Entanglement** — gloves, sleeves, aprons, jewellery or hair drawn into the blade or wheels.
- **Contact with a coasting blade** when clearing or measuring too soon after switch-off.
- **Blade breakage** from incorrect tension, a dull blade, or forcing a curve too tight for the blade width.
- **Stored energy** released during blade changes and servicing.
- **Slips and trips** from offcuts, fat, coolant or water around the machine.
- **Noise and airborne particulate** depending on material.

10. EMERGENCY ACTIONS AND REPORTING

1. Hit the emergency stop. Do not attempt to free a trapped person while the blade can move.
2. Isolate the machine and apply lockout before any rescue or first aid at the machine.
3. Summon first aid and emergency services. Preserve any amputated part per your first-aid procedure.
4. Do not disturb the scene beyond what is needed to make it safe.

- 5. Notify the supervisor immediately. Report the incident to the regulator within the required time — in the United States, within 8 hours for a fatality and 24 hours for an amputation, loss of an eye or in-patient hospitalization.
- 6. Record the event, and report near-misses and dull or damaged blades through the same route.

11. AUTHORIZATION AND SIGN-OFF

Prepared by (name, role)	
Reviewed by (supervisor)	
Date issued	
Operator name	
Operator signature / date	
Supervisor signature / date	

Add a row per authorized operator, or attach your training matrix.

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