

Workers Compensation Board Of British Columbia

Regulations on Saws and Knives

27.14 Unattended machinery

An unattended saw and other woodworking machinery must not be left running if a worker could be endangered.

27.15 Sharpening saws and knives

Equipment used for grinding saws and knives must have an effective local exhaust ventilation system or other effective means of dust and mist control.

27.16 Babbitt melting

(1) Babbitt melting must be done at a controlled temperature.

(2) Exhaust hoods must be provided for melting and pouring operations or an equally effective air contaminant control method must be used.

(3) A babbitt pot must be covered.

(4) If practicable, a lead-free babbitt must be used.

27.17 Sharp-edged tools

The cutting edges of saws, knives, cutting heads, and other sharp-edged devices, must be

(a) guarded to prevent worker contact, when stored in operating areas, and

(b) handled and transported in a manner which will not endanger workers.

27.18 Circular saw guarding

(1) If there is a risk of injury to a worker from the blade of a circular saw, or flying debris from the saw blade, the portions of the blade outside the cutting area must be fully guarded.

(2) Guards must be arranged to allow cutting with a minimum amount of exposed blade.

27.19 Band saw guarding

(1) A band saw and its band wheels must be enclosed or otherwise effectively guarded except in the cutting area to prevent worker contact and to restrain the saw blade in the event of blade failure.

(2) If metal enclosures are used with shake band saw wheels, the top door panel must be fitted with an inside wooden liner.

(3) For a hand-fed shake band saw, the distance between the top of the table rollers and the top guide must not exceed 36 cm (14 in).

27.20 Slasher and trim saws

(1) Barriers to protect workers from ejected material must be installed in front of and behind all multiple slashers and multiple trim saws.

(2) If a worker may be caught or pulled into a saw or other danger area by a lug chain or similar transfer system, an emergency stopping device must be fitted on the conveyance to automatically stop the transfer system before the worker is pulled into the danger area.

27.21 Circular cutoff saws

A circular cutoff saw must be fully enclosed, guarded, or located to prevent inadvertent contact with the running saw when it is in the retracted position.

27.22 Splitters

(1) If a worker may be exposed to kickback from a circular saw with rip-type teeth, the saw must be fitted with an effective splitter.

(2) Subsection (1) does not apply to an edger or circular resaw which is equipped with anti-kickback fingers.

27.23 Chop, trim and swing cutoff saws

(1) Each swing cutoff saw must have

(a) a device to automatically return the saw to the back of the table,

(b) a limit chain, or similar device to prevent the saw from swinging beyond the front of the table and past a position where the gullets of the lowest teeth rise above the top of the table, and

(c) a latch or similar device to prevent saw rebound.

(2) A swing cutoff saw operator must be positioned so that no part of the operator's body is in line with the saw.

(3) Each chop, trim and swing cutoff saw must

(a) be effectively guarded,

(b) be guarded by location, or

(c) have other effective means that prevent the operator's hands being placed in the cutting area when the saw is activated.

27.24 Circular saw guides

(1) Circular head saws and scragg saws must be equipped with safety guides.

(2) If a top saw is only used occasionally, such as to cut flares off oversized logs, the requirements of subsection (1) do not apply.

(3) Guides that must be adjusted while the saw is in motion must have the adjustment controls located away from the danger area.

27.25 Cutoff saw interlocks

If a powered conveyor feeds material at right angles to the blade of a circular cutoff saw, the system must have interlock control devices to prevent side loading of the saw.

27.26 Saw operator location

Log and block cutoff saw operators must be positioned so that no part of the operator's body is in line with the saw unless adequate barriers have been installed.

27.27 Saw speeds

A saw must not be operated at a speed in excess of the maximum speed recommended by the manufacturer.

27.28 Saw maintenance

(1) A saw must be inspected frequently and maintained in a safe condition.

(2) A dull, badly set, improperly filed or tensioned saw, or an inserted tooth saw with poorly fitting shanks or worn bits, must be removed from service.

(3) A saw must be inspected for cracks and other defects each time the saw is sharpened, and a cracked saw must be removed from service until repaired by a qualified person.

(4) A saw or saw collar damaged by excessive heat or undue stress must be removed from service until inspected and repaired by a qualified person.

27.29 Cracks in circular saws

(1) A circular saw with a crack of any size adjacent to the collar line, or with a crack elsewhere which exceeds the limit specified in Table 27-1, must be removed from service until the crack is repaired and the saw retensioned by a qualified person.

(2) A circular saw with a crack near the periphery which does not exceed the limit specified in Table 27-1 must be removed from service until the crack is repaired or the lengthening of the crack has been arrested by slotting, centre punching, drilling or other effective means, and the saw is retensioned as necessary, by a qualified person.

Table 27-1 Circular saw crack limits

Saw diameter		Maximum length of crack	
Millimetres	Inches	Millimetres	Inches
up to 300	up to 12	13	1/2
300 to 610	12 to 24	25	1
610 to 915	24 to 36	38	1 1/2
915 to 1220	36 to 48	50	2
1220 to 1525	48 to 60	64	2 1/2
over 1525	over 60	76	3

27.30 Cracks in band saws

(1) A band saw, other than a shake band saw, with a crack exceeding the limit specified in Table 27-2 must be removed from service until the crack is repaired and the saw retensioned by a qualified person.

(2) A band saw, other than a shake band saw, with a crack not exceeding the limit specified in Table 27-2 must be removed from service until the crack is repaired or the lengthening of the crack has been arrested by centre punching or other effective means, and the saw retensioned as necessary, by a qualified person.

(3) A shake band saw with a crack must not be used.

Table 27-2 Band saw crack limits

Band saw width		Maximum length of crack	
Millimetres	Inches	Millimetres	Inches
up to 125	up to 5	1/10 of saw width	1/10 of saw width
125 to 300	5 to 12	13	1/2
over 300	over 12	19	3/4

27.31 Band saw wheel wear limits

(1) Unless otherwise specified by the manufacturer or a professional engineer, the minimum rim thickness of a cast steel band saw wheel measured 25 mm (1 in) inboard from the rim edge must be

- (a) 14 mm (9/16 in) for wheels up to and including 1.8 m (6 ft) diameter,
- (b) 16 mm (5/8 in) for wheels over 1.8 m (6 ft) up to and including 2.75 m (9 ft) diameter, and
- (c) 17.5 mm (11/16 in) for wheels over 2.75 m (9 ft) diameter.

(2) A band saw wheel over 1.2 m (48 in) diameter must be nondestructively tested for cracks by a qualified person at least once a year.

(3) A cracked wheel or a wheel which has been exposed to excessive heat must be removed from service until the wheel manufacturer, or a professional engineer, has certified it as safe for continued use.